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REA P. McGEE, M.D., D.D.S.
Contributing Editor.

THE ELEVENTH HOUR

REA P. McGEE, M. D., D. D. S.

Lieut. Colonel, D. C., U. S. A.



WITH the wisdom of experience, the people of Europe instinctively looked at the teeth of the Americans. They spoke of the splendid physique, the elastic step, and the glowing health of our men. These things pleased them greatly but they had watched their own men leave the comforts of civil life to go into the field and into the trenches looking equally fit, only to see thousands after thousands of them invalidated back because their mouths and teeth had been neglected.

In those trying days when every man was needed, it was a tragedy to send soldiers away from the line because of defects that could have been eliminated by proper treatment in time of peace.

Those people over there know that a strong man with good sound teeth can stand the strain and that a soldier who cannot eat the Army rations and who has infection in his mouth is a candidate for the hospital.

Fortunately for America, our soldiers have the finest teeth of any soldiers in the world, but think of the great number of otherwise available men who were refused on account of their teeth.

The events of the last few years have brought dentistry into a position of prominence that we must accept whether we wish to do so or not. Millions of men in the world have had dental treatment that otherwise would have gone through life suffering and in ignorance of the benefits to be derived from a healthy mouth.

Millions of men and women in our country, who have never been interested in oral hygiene before, are now asking for information, and what they read they believe.

The world has reached the point where it is ready to accept the great truth that *the survival of the fittest begins with the mouth*.

The ground is prepared, it is up to us to sow the seed. In order to educate the people it is necessary to go to them and the way to reach the greatest number is through the public press. It is unfortunate that most of the newspaper stories in the past that had any bearing upon technical subjects were written either by people without a thorough knowledge of the subject or by those who had an axe to grind.

Oral Hygiene has decided to take on a new department, that of newspaper publicity and I have accepted the position of Contributing Editor of the Magazine in charge of this depart-

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ment. This will be known as the *Department of Lay Education* and will furnish to the newspapers of the United States and other English-speaking countries daily stories in regard to mouth hygiene and dentistry in general that will be the real truth and will be put up in such a readable way that the plain people will read them. The most careful consideration will be given to our well-established professional ethics; every article will be written with the one idea of conveying useful information to the reader. The burden of this information will be the conservation of health and the undisputed fact that the health of the mouth is the greatest single factor in the health of the individual.

There are now about ten million people in the United States who visit the dentist professionally. These syndicated stories will probably reach twenty-five million or more people when the syndicate is fully established. Just think what that means to the oral hygiene movement and to dentistry in general.

This syndicate can be successful only if it has the complete support of all of the dentists in all of the dental societies in the country. No community will be either too small or too large to be considered a very important factor.

At first much of the manuscript will be written by myself but it is hoped that from all over the country dentists will send in their ideas, suggestions, criticisms, experiences and stories. The dentists of America will be expected to act as a board of censors and as contributing editors. The McClure Newspaper Syndicate has taken the contract for placing this matter in the newspapers. There will be nothing haphazard about it. Every move has been carefully studied out. Nearly a year has been devoted to preliminary work, paving the way for this announcement of our plans. The newspapers of this whole country will be canvassed by men whose business it is to sell news and they will be shown what this health movement means from a straight business standpoint.

Every dental society should send its committee on public information to the local newspapers and tell them that the McClure Newspaper Syndicate will furnish daily readable stories of three-hundred words each upon health subjects from the dental standpoint and that these stories will not only be true but that they be a benefit to the public that reads them and will be subscription getters as well.

When an idea on this publicity subject strikes you, send it to me in care of the Editor of *Oral Hygiene*, lead pencil, ink, or typewriter; it makes no difference; we will put it in shape, if we can use it. This seems like a big undertaking; it is. This carefully planned publicity is to be given to the dental profession without one cent of expense. There is no profit in it for any one. All that we

can hope for it is that it will pay its expenses; any deficit will be put up by the publishers of *Oral Hygiene*. So come in and help, there is everything to gain and nothing to lose. No one who is connected with this movement can afford to get in bad with the National Dental Association so you can rest assured that there will be a very strict regard to the proprieties.

Tell your local newspaper that this syndicate is not handled by amateurs but that the business management is in the hands of the McClure Newspaper Syndicate and that when a contract is made it will be lived up to, to the very letter.

If you would like to see sample stories which have already been prepared write to McClure Newspaper Syndicate, 373 Fourth Avenue, New York City. In addition to sample stories they will send circulars describing the service which may be used by you in approaching local publishers.

When the oral hygiene movement was started in the public schools it seemed like a hopeless job, but truth and publicity put it over and today that very movement is one of the proudest achievements of dentistry and furthermore it is one of the greatest advances in the matter of public health that has ever been made in any country at any time.

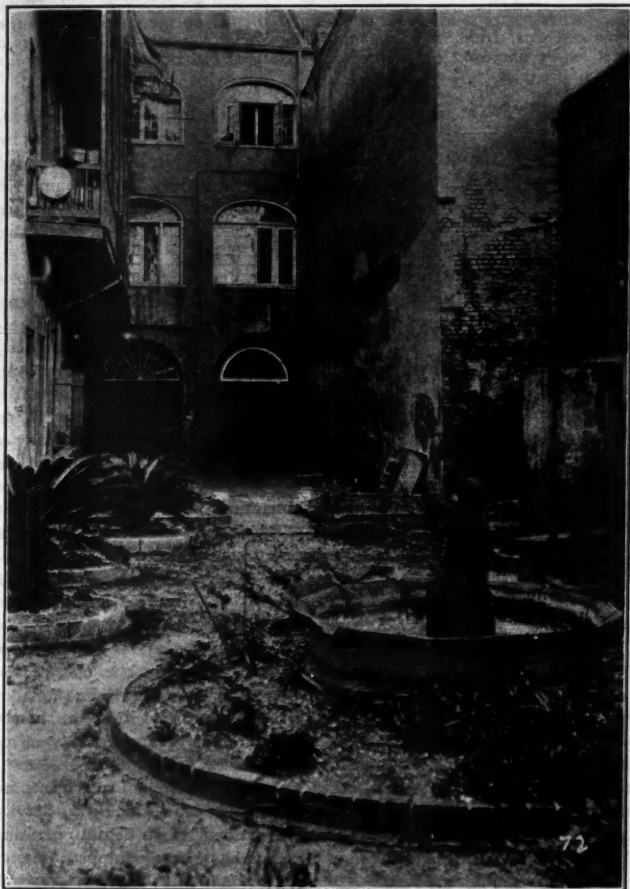
When the little magazine *Oral Hygiene* was started, failure was predicted on every side but for nine years it has forged ahead and instead of running out of matter to print it must now branch out into the daily press.

Old patients and new patients will discuss these articles with you; when they do, make notes of points that they may want cleared up or topics that you feel would be desirable to print and send them in. *If each dentist will feel that he has a personal interest in this publicity and will contribute even a little in the way of information and suggestion, it will be the biggest campaign for the education of the public in the line of health that has ever been undertaken.*

Dentistry has reached the forks of the road, we must either take advantage of the prominence that has been thrust upon us or stand aside and let those who wish print any old stuff that sounds good and let it go at that.

The Government of the United States did not hesitate, when it wished to reach the people direct, to go into the newspapers upon every occasion. The results were beyond all expectation. Certainly our dignity is not greater than that of the Government under which we live and it is our desire to reach the people of this country with convincing reasons why they should care for their own mouths and the mouths of their children. It is the duty of each dentist to take a personal interest in this campaign of education.

The health of the nation is its greatest asset and in the triumphal arch of national health, oral hygiene is the keystone.



*Beautiful old French Court Yard, 613 Royal Street in the
"Vieux Carre" of New Orleans, La.*

SOCIAL SERVICE DEPARTMENT OF THE AMERICAN CAST IRON PIPE CO.

C. B. BRAY, D. D. S., Dental Surgeon in Charge. Birmingham, Ala.

The author portrays the ideal conditions enjoyed by the employees of the American Cast Iron Pipe Company. The Social Service Department is a most active one, and the dental dispensary is but one of the numerous uplifts.



TWO motives, one humanitarian and the other business, prompted the American Cast Iron Pipe Company to inaugurate its Medical Service Department some seven years ago. The work has proven a complete success from both viewpoints.

This work was not started at Acipco on a big scale and with a grand flourish, but, with a small beginning, with one doctor in a meagre office in a corner of the plant, it has grown by natural development to probably one of the most complete Medical Service Departments of its kind in southern industry. At first, of course, it included only a physician with a satchel full of pills and a breast full of the milk of human kindness. It has now grown until it occupies a six-room building of its own in which are housed two physicians, a dental surgeon and two trained nurses. Associated with this staff is a group of consulting specialists and a skilled surgeon whose offices are in the city, but who can reach the plant, or the home of any employee, within a few minutes when called.

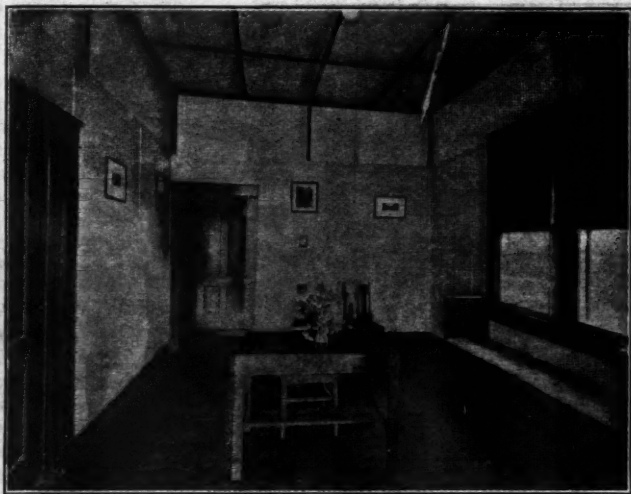
The cost of this service to the employee and his family is \$1.00 a month to a married man and 50 cents a month to a single man. This cost is not assessed with a view to

meeting the expenses of operation, which, of course, it will not do by 50 per cent at least. It is intended rather to convey to the employee that he is not getting something for nothing. The experience of this company is that all aspects of paternalism must be avoided in work of this kind. The charge to the employee conveys to him the impression that he pays for what he gets, that the service is of more value than if it were free, and that he is a free agent to accept or decline it, or criticise it, as he sees fit. Many a man can be led who will not be driven. Any aspect of coercion or obligation in connection with work of this kind immediately arouses resentment and unpopularity.

This service includes the wife and children of married men. People are urged to come to the Medical Dispensary whenever possible for minor treatment, but one of the doctors, the surgeon, and one of the nurses are visiting the homes of the employees practically all of the time.

Of course, all general treatments are given at the Medical Service Department. Two dental operating rooms have been equipped; one for colored and one for white members. The work performed includes extraction, treatment of gums and cement fillings. The higher grade work, such as gold fillings and bridgework, bears a nominal cost to pay for the expense of the

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Waiting Room in the Medical Dispensary

materials used. This is borne by the employee receiving the treatment and can be paid in weekly installments when desired. Some remarkable cures of rheumatism, neuralgia and stomach disorders have been worked through the Dental Department. Some cases have been found in which abscessed teeth were discharging pus into the system, and probably had been doing so for a number of years. Of course, treatments other than extraction of the tooth had been tried without number and without result. The extraction of the tooth in these cases resulted in a clearing up of the condition which seemed a little less than marvelous. These dental rooms are equipped with every modern convenience.

The Medical Service Department is a part of the general welfare work of the American Cast Iron Pipe

Company, which includes a three story Y.M.C.A. building, a bath house and a modern negro village. In the Y.M.C.A. building are located two motion picture theatres which are free to employees twice each week, one being for white and the other for colored employees. In the same building is a cafeteria where meals are served both night and day to employees at cost. In both the white and colored departments of the Y.M.C.A. are reading rooms, libraries, pianos and phonographs. The third story of the building is a dormitory for colored men who work in the shop, where they may procure a clean bed for five cents per night. The bath house is equipped with steel lockers, basin and shower baths, for both races. The negro village consists of three, four and five room houses of various designs with modern sanitary fix-



In the Dental Department

tures and electric lights. In addition there are two athletic fields, one for white and one for colored employees, where baseball, football and similar sports are indulged in. In the Y.M.C.A. building are located classes, free to employees, in elementary education, which is intended especially for colored men who have never learned to read or write. There are also classes in mechanical drawing and similar subjects for white apprentice boys, and a class in foundry practice for men who desire to become more familiar with the fine points of their profession.

In the negro village is a Union Church and a school building donated to the community by the company. The school is operated under the city public school system. A two story domestic science building was erected by the company with a tile kitchen, modern and sanitary in every respect, in which lessons in domestic science are

given to the girls and women of West Acipco twice each week by trained experts employed by the company. The past three years a hundred acres of ground have been under cultivation as war gardens, free to employees, and a canning plant is operated by the company for the benefit of those who raise sufficient vegetables to be canned for winter use.

Every fall a colored agricultural fair is given on the colored athletic field in which several hundred dollars are awarded in cash prizes for the best exhibits of live stock, agricultural produce and domestic science materials. Of course, at this fair there are numerous amusements and sport events.

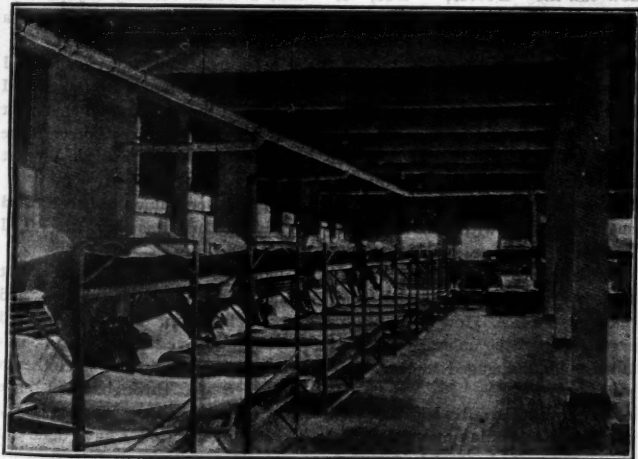
These things have come about at Acipco by a natural development through a period of ten years. No system was laid out or designed in the beginning. The company merely started out to do the proper and obvious thing as it presented itself.

President J. R. McWane speaks of this work as follows:

"Much has been said during the war on the subject of morale. Briefly it is the thing without which no battle is ever finally won. The industry that maintains an army of workers without regard to their working and living conditions, their health, recreations, religious and social life cannot succeed in the largest sense. Such interest can be manifested while still doing justice to the workman in the matter of wages and hours, and without sacrificing his self-respect. If it is not carried out on this principle the whole thing is a failure, but if done in the proper spirit the result is not an army of slaves, but happy and contented free men, fighting in harmony with the purpose of their leaders.

From the standpoint of the management, perhaps the most satisfactory result is the promotion of team work and the spirit of cooperation. A

brickyard that is content to make bricks as they were made when Pharaoh exacted 'bricks without straw' need not expect the largest returns from such an investment; but if there is an ambition to make a different brick, better burned, of stronger material, of more attractive color, then this kind of work pays. The glory of business is not to make money out of it alone, but to make progress in it, to develop men and methods and product, to improve the state of the art.' This can not be done by the management alone, however resourceful and brilliant it may be. It can only be done when the rank and file of the workmen believe in the management and are willing to take hold of whatever is proposed and put it over. With such a force it is possible for things to be better today than yesterday, and better tomorrow than today, for each day to make some distinct progress, and everybody to feel that 'we did it.' "



Dormitory in colored Y. M. C. A. where a clean bed costs five cents

TO BE OR NOT TO BE—THAT IS THE QUESTION

GEORGE B. HYNSON, Philadelphia, Pa.

This is an imaginary experience. The author is not a dentist but he does know something about dentistry. Unless his charges are true they deserve an answer.



It was in June of the year 1912 that we all stood up in a row and received our diplomas. The President of the University had said some pleasant words of encouragement. The long, weary grind was over and we had our pieces of parchment to show for our effort.

I went back to my boarding house hugging the precious sheepskin. I squared up with my landlady, said good bye to the boys, and suddenly realized that this phase of my career was over.

First, I was going back home. I wondered whether the natives would now call me "Doctor," "Doc," or plain "Bill" as of old. And there were the debts—eight hundred dollars in all!

I had something to sell and how was I going to sell it? This idea I hadn't got in college. The nearest we ever got to a discussion of it was an occasional reference to fees by one of our professors. We were thoroughly imbued with the idea that we were to serve humanity, yet everywhere we turned we realized that everything we wanted commanded a price. How were we to serve humanity unless we could subsist while engaged in the aforesaid service?

After thinking it over, I arrived at a decision. I would lay my case before those persons who had had experience. So I borrowed a few more

dollars and took the train back to the city.

The first man I sought was one of my professors who seemed the most human of the lot. He had evidently succeeded in building up a practice that was remunerative. I would go to him, not as a pupil, but as a professional brother. He would doubtless advise me, taking into consideration the fact that my need did not present a mere abstract problem, but the urgent necessity of turning my skill, whatever it was, into cash.

He was exceedingly affable and sympathetic, but before I had got into my subject I saw that but one idea obsessed him. He was afraid that I would identify myself with some advertising office or open a "painless parlor" for myself.

«I assured him, however, that I had no such intention, and after I had made my position on this point very plain, I began to appreciate the fact that he had no further interest in me.

So, being very much in earnest and realizing this was my funeral, I went after him.

"Doctor," I said, "I have spent four years in this college and worked like a horse; I have borrowed money and lived in a cheap boarding house, and skimmed on clothes in order to get through. You have given me a diploma, which is pretty good evidence that I have done my part. Now, what am I to do with it?"

"What right have you to ask me that?" he shot back at me.

"The same right," I said, "that you have when you pay your money for an X-ray machine or a new cement, to demand that the seller show you how to use it. And if he doesn't show you how to get results, you make him take it back!"

"That's a funny proposition for you to put up to a dental college," he said.

"Do you really think it is?" I asked.

"Or is it merely a habit of mind? Just apply it to your own practice: Every operation you perform has a value in proportion as your patient gets service out of it. In other words, you have a responsibility to make it work."

"But the situations are not at all parallel," he said, beginning to show annoyance. "You come to the college and pay your money to learn the art and science of dentistry. We perform our part of the contract, but it is certainly not a part of our duty to establish you in practice. Is there anything wrong with that position?"

"Yes, there is something wrong with it," I replied. "It is absolutely selfish and unethical."

Now, I saw that he was getting hot, but I did not flinch.

"Explain yourself," he said.

"Well," I went on, "you professors are always preaching the service of humanity; yet you turn us out into the world with our diplomas, and most of us owing money, and you haven't a word of practical advice for us except 'don't advertise!' Our whole course of ethics, boiled down, consists of this single negation 'don't.' What we are all asking is for something positive, something that will guide us along a course

where we may serve humanity while humanity is reciprocating."

I was warming to my work, so I went on: "You are like an instructor in swimming. You give us setting-up exercises, show us the proper strokes while we stand waistdeep in the pond, and then one fine day you tell us that we have finished the course. Then we all go down to the ocean and plunge in—and some of us never get back to the shore."

"A rather amusing comparison," he said with a sneer.

"It may be," I replied, "but although I am a novice, I think I have put my finger on something. The colleges teach us everything but how to go out in the world and establish proper relations with the public. You professors either don't know or you are holding something back. You only hold up a warning finger. You apparently don't care whether we succeed or fail, although how humanity is to be served if we fail is a problem."

"But," he said, "you know as well as I do that we can't guarantee the success of every man. Some are failures from the start, and certain men who have graduated in your class will never make a success in their calling. This ineptitude develops in the freshman year of some men. We would have a pretty big contract if we were to guarantee to make all of our graduates successful."

"Doctor," I broke in, "pardon me, but that is evasive. In the first place, you have no right to take money from a man who shows early in the game that he will never make a dentist. Further, the ideal of the dental college stops short of its proper fulfillment. You think of

making dentists. Why not think further and have for your object the advancement of dentistry? Instead of visualizing these young men with diplomas in their hands that they don't know what to do with, why not keep in mind these men in contact with the world, giving that service that it needs and that, incidentally, will bring them their reward?"

"Well," he drawled, "it seems that

asked with a curl of the lip. "My suggestion, I am afraid, will do *me* little good," I replied. "But why not give a real course on the practical side of dentistry, embracing ideas of how and when to establish a practice and how to maintain it, including business essentials and the psychology of dealing with the public on a common sense but ethical basis? And why should n't professors be honest and human, giving

He assured me that all that was necessary was to take offices in a fashionable part of town or in one of the large professional buildings, furnish them ornately, establish a complete modern outfit, and start in to practise dentistry in a big, broad way. When he gave me the figures on the outfit he recommended, I nearly fell off my chair. Then there was the rent and the furnishings to be considered. The outfit could be bought on a long term lease—in other words borrowed. I figured in the back of my head that, if I should be lucky, I could pay the office rent the first year, begin to pay a little on the furnishings the second year, and that within twenty years, if I was frugal, I might settle for my outfit and be able to trade it in as part payment for another

now you are the lecturer and I am the student."

I ignored this and continued; "When I considered taking a course in this college, I read your catalogue. It dwelt upon the opportunities in dentistry. I went into it largely to make a living. Any man is a liar who says he was not governed principally by a like motive. And you have no constructive suggestions to offer as to how I am to do this thing that I have given up four years to do. Your only advice is a series of don'ts."

"What would you suggest?" he

us their real personal experiences instead of certain items that they deem adapted to babes and sucklings?"

I reached for my hat, but kept talking. "Of course, it is all hopeless as far as the college is concerned, but there is a place where I *can* get some instruction, although it may be tainted with self interest."

"What place do you refer to?" asked the Doctor.

"The dental dealer," I answered.

"He will try to sell me an elaborate outfit, of course; but he will really be interested in my success, for upon

that he must depend for his money. The only real course on the application of business to dentistry seem to be given by dental manufacturers and dealers. Maybe these courses are onesided," I finished, "but they are better than none."

"Crass materialism," remarked the Doctor.

"Just a little bit of commonsense," I retorted as I bowed myself out.

After recovering my breath, I boarded a car and headed for the center of the city. There in the very heart of things, in the most exclusive office building in the place, I found my dealer. I paused before the mahogany door lettered in gold. In my pocket was \$3.85 and I could boast of no other assets beyond my diploma.

I was never more courteously received. The dealer knew me as he knew every other man of my class. I told him of my prospects, my hopes and my financial status. He was impressed and optimistic, and eager to advise me.

He assured me that all that was necessary was to take offices in a fashionable part of town or in one of the large professional buildings, furnish them ornately, establish a complete modern outfit, and start in to practise dentistry in a big, broad way.

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within twenty years, if I was frugal, I might settle for my outfit and be able to trade it in as part payment for another.

But the dealer, unlike my college, had thought it all out. He had a constructive plan. Of course, he was figuring on "getting his," but who can blame him?

He had worked out an elaborate system for every minute of my time, and of getting the proper allowance for it. Besides this, he instructed me in the selling game, showing how by tact and firmness business could be developed and fees exacted—or extracted.

He had a chart all worked out, showing how many minutes a day I should work and how much per minute I should charge. If I followed this system, I could make a certain definite amount every year. He proved it, too, for he had the figures.

"It looked too good to be true; there must be a flaw in it somewhere. "But where am I going to get the patients?" I asked.

"Join a few clubs and fraternal organizations," he said, "Learn to be a mixer. Dress well and carry the look of prosperity; and don't be afraid to mention your work at opportune moments. Keep up your nerve and the practice will come. And when you get it, don't forget to charge your little ten or fifteen dollars an hour. Every minute must be accounted for, and the slogan is: 'The patient always pays'."

"But what should be the basis of my fees?" I asked. "Time, or service, or the ability of the patient to pay?"

"Well," he hesitated an instant and then went on; "perhaps all three may be taken into consideration. If your patient is a man of wealth and

you save him from the toothache, he ought to be willing to pay almost anything for your service."

"In other words, all that the traffic will bear," I said.

"Perhaps you may put it that way," he replied. "Take the case of a society woman proud of her appearance, and you conceal an ugly defect in one of her front teeth; why shouldn't she pay for the service rendered?"

"Isn't the right price in ethics just what the average good dentist would charge—or, in other words, the market price?"

"You should discourage shopping," he said.

"Oh, I see. Shopping is unethical," I said.

"Yes," he said, "and it should never be encouraged."

"But don't we all shop when we buy things? Do you buy a suit of clothes without asking the price? Don't you shop in order to get proper discounts from manufacturers? Can we turn aside this law of human nature?"

"But a profession is different," he said.

"The only difference is because it is presumed to be more ethical," I replied.

"To my mind, a fee not based strictly on service but on the ability of the patient to pay would place professional ethics below business ethics."

"Oh, no," he protested; "the most ethical dentists do it."

"And now let us examine the charge-by-the-minute plan," I continued. "Charge for examination?" I wanted to know.

"Of course, you should."

"Charge for asking how John and Mary are, and for the time involved in making appointments for them?"

"Why, certainly!"

"Charge the same when I'm feeling fit and when I'm on the bum? When I am working fast and when I dawdle? Charge the same when I'm doing a cracker-jack piece of work and know it, and when I have my doubts as to whether the thing I'm doing is worth a darn?"

"Oh," he said, "that's another point. You must keep fit mentally and physically and always hold your work up to a uniform standard."

"Then I had better give up the thought of practising dentistry right now."

"Why?"

"Because there isn't any human being like that and never will be. Your man is fiction, a hypothesis."

"Then," said he with a note of sarcasm, "on what principle would you charge?"

"On the basis of what the service is worth," I ventured. "There is no other honest basis. If I am out with the boys half the night or have to trot the baby till four A. M. and am inefficient next day, my time is no basis on which to fix my charge. It may cost the farmer \$5.00 to raise the bushel of potatoes he sells me, but that is no reason why I should pay more than the market."

He wanted to know how I would arrive at a value for dental services, and I told him that I would do as the merchant does, taking all the factors available into consideration; but that the chief factor is what similar service generally commands. "For," I said, "If I am to charge according to the financial standing of my patients I should have to go by Dun's or Bradstreet's reports, at times working below cost and at others practising piracy. If I am

to work by the minute, I have no fixed standard, for the value of my minutes must vary. So I am limited to doing business according to the market."

You will see that I wasn't getting anywhere, so I went out to call on a friend who runs a hardware store up-town. That evening I took up the matter with him.

"When are you going to open your tooth palace?" he asked jocularly.

need plugging? Don't they have toothache? Bet you could keep busy ten hours a day pulling stumps. And plates—I'll wager there are a thousand needed within a dozen squares of here right now."

"But," I said, "dentists usually locate in the more exclusive portions of the city or in professional buildings; they desire a selected class of patients who seek them out and come to them."

"Some humanity around here ain't there?" he asked. "Don't they have holes in their teeth that need plugging? Don't they have toothache? Bet you could keep busy ten hours a day pulling stumps. And plates—I'll wager there are a thousand needed within a dozen squares of here right now."

"But," I said, "dentists usually locate in the more exclusive portions of the city or in professional buildings; they desire a selected class of patients who seek them out and come to them."

"Then your 'service to humanity' is all a bluff," he said. "You want work and here it is. These people are willing to pay for it and to treat you as a neighbor and a friend. They are the kind of people that keep the grocers, the doctors, and the department stores busy. But *you* don't want them. You want a 'selected' class. These people are as good as you are, and better off than you are, and yet you are running away from them."

I told him my difficulties, my perplexities and uncertainties.

"What's the matter with this neighborhood?" he wanted to know.

I told him it didn't seem to contain the class of people that would require the best dental work.

"Well, what's your idea in practicing dentistry, anyway?" he exclaimed.

I told him that we were pledged to the service of humanity.

"Some humanity around here, ain't there?" he asked. "Don't they have holes in their teeth that

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"But don't a lot of these people patronize the advertising dentists?" I asked.

"Yes," he said, "they do, and I suppose they will keep on doing it as long as you 'ethical' fellows run away from them. You don't want this sort of practice, and yet you denounce the fellow who comes in and gets it. If you don't approve of advertising, why don't you show that this work can be done without advertising?"

I had no answer; here was a new angle that neither the professors in the college nor my dealer had touched upon.

My friend went right on: "You fellows make me sick. I read the other day about all kinds of disease being the result of bad teeth, and every toothpaste ad says 'visit your dentist periodically,' and yet the dentists hide from us. Do you think that if you settle in an exclusive locality I'll send patients to you? No, I'll patronize home industries and tell people to go to the advertising man who is human enough to know that people of our kind exist."

He saw that I was beginning to waver, so he pressed his advantage.

"You can get an office next door," he said. "Take it tomorrow. I'll back you for the rent. I guess you haven't much to start on, but I'll help you out. Go buy the things you need to work with, but nothing for show. Pay cash. Furnish your office like your mother furnishes her parlor; it seems that simple things are fashionable now. Make your patients feel at home and not as if they were in a vault or a corridor of the Waldorf-Astoria."

"By George!" I exclaimed. "This sounds like sense."

"It is sense," he rejoined. "Be human. A doctor is allowed to practise because the people need him, and it's the only excuse a dentist has. It is the sensible thing, then, to go direct to the people, live with them, know them, serve them, and trust them to do the rest."

"I wonder what the advertising man around the corner will do?" I mused.

"Well," said my friend, "I think the best will survive, and you may be sure he will stay until something better replaces him. Say—I've got an idea!" he finished.

"Shoot it," I told him, for now he had me sold on the proposition.

"It's this. You settle next door and hang out your sign. You don't advertise and the other fellow does. The people will notice the difference and will get the idea quickly. You see, you'll get a lot of advertising out of *not advertising*."

Well, all of that was seven years ago. I haven't made a fortune, but I have been busy. I have paid all my debts and now own the house in which my office is located. Many of the people around call me "Doc," and I rather like it, for it signifies that I belong to the community. The advertising man is still around the corner, but my practice is worth more than his and I think I may say modestly that mine represents the cream.

I am thinking seriously of recommending to my college that they give a course on "How to get into practice and how to conduct it," and I shall suggest my old hardware friend as the professor in charge.





One of the beautiful parks of New Orleans, La.

VODKA MOUTH

History or anything you want to call it.

First Lieut. JOSEPH MATSON, D. C.

31st. Infantry Infirmary, Vladivostok, Siberia.

The following epistle came to us from near the Arctic Circle, from far away Siberia, where the receipt of mail matter of any kind is a rarity. We count ourselves most fortunate in being able to make this presentation. The writer, although far distant from home, is not a bit sorry for himself, and is enjoying most of the luxuries of home, and some not so obtained, including bottled beer of the ancient brew. But read for yourself.



HE extreme southern part of the Siberian coast, which here run east and west, is indented by the bay of Peter the Great.

At its head a peninsula extends south-westward, dividing the bay into two smaller bodies called the Gulfs of Amur on the west and Ussuria on the east. A small arm of the Gulf of Amur extends eastward into the blunt end of the peninsula, and on the shores of this small arm, known as the Golden Horn, is situated the City of Vladivostok. Facing the city from the gulf and on the city's extreme right is a valley. Now go up this valley about a mile, and on the right hand side you will see a low, one story building. Outside this building there is an American flag with a Red Cross flag beneath it, inside this building you will find the dentist, or as the Russians would say *Zub noi frosh*. Now I can't give you my personal location, but if you should drop in here some afternoon to sell me dental supplies don't come at 3 o'clock, for that is my siesta hour.

The equipment consists of a portable field dental outfit. A portable folding chair, cabinet, desk and supply chest. As there is no electricity, the engine, lathe, and blowpipe are

operated by man power. The fountain cuspidor is an unknown thing in this country, but a regular G. I. bucket which can be burnt out every day answers the purpose admirably. In regard to supplies, all I can say is we have the best of everything. Our amalgam, mercury, forceps, cutting instruments and burs are fine.

Have polished several plates with that d— foot lathe. One of the first things I am going to get for my new office when I return is an electric lathe. Try polishing a plate fresh from the vulcanizer with a foot lathe. Yes, I dare you try it!

To the best of our ability we follow Dr. G. V. Black's theory and technic in cavity preparation and filling. The use of the matrix, wedges, extension, etc. is rigidly enforced. Nothing is too good for the American soldier; he is deserving and receiving better care of his teeth and mouth than ever before. Now that does not include every one of our soldiers. You can give some of the men every opportunity and every advantage that is in our power to give, but it's the old story, "You can lead a horse to water, but you can't make him drink."

We have the general run of cases (such as fillings, extractions, abscesses, crowns to remove, plates to make, etc.) with the exception of an unusually large amount of in-

fectured gums to treat. It's a peculiar infection. It could easily be called Vincent's Angina, Ulcerative Gingivitis, or even pyorrhea. Whatever the soldier names it, that's what I call it, but most of the soldiers call it "Vodka mouth," because all guard house patients that have been on a month's spree and never thought it necessary to brush their teeth since they were using such a powerful antiseptic, have it. Other soldiers are more lenient about Vodka, and say it comes from the water. In fact, they will admit their sore mouth comes from anything but from neglect. I was knocked cold by what one soldier admitted when he said; "I've let my teeth go Democratic."

Lamace E. Sargent, Supply Co., 31st Infantry, and with eleven years service, reported to this infirmary April 15, 1919 with a typical case of "Vodka mouth." On the right hand side the gums were badly ulcerated. The ulcers extended from the third molar to the centrals of both upper and lower teeth. His face was very swollen. His teeth were perfect; not a filling. On the first sitting he was given a thorough, or as near thorough, prophylaxis as possible, the ulcers curetted and a caustic used, then $MgSO_4$ and a mouth wash. We kept that up for a month, only we cut down on the caustic. We irrigated, we did everything, but no improvement. One month and five days after his first visit, May 20, 1919, the infection was as bad as ever, and his face still badly swollen. I made a tuberosity and inferior dental injection and extracted both the upper and lower

third molars. Then more $MgSO_4$, and said a prayer. He felt like a fighting cock in two days. If he had not, I never would have told you the story.

Most all of the gum infections we have will respond to a thorough prophylaxis, plus curetment of ulcers, together with a mild astringent, antiseptic mouth wash. Capt. Veach, Machine Gun Co., 31st. Infantry, has for the last few years been troubled with sore and bleeding gums. Mouth washes, prophylaxis, massage and everything would do him no good. In some way I received a copy of *The Dental Cosmos*; out of it I obtained this prescription:

Alcohol.....	1 part
Vinegar	1 part
Water	8 parts

Well, the Captain is having absolute comfort, gums have quit bleeding and are not a bit sore. I use it on every one now and sure am getting results. If it's a bad case, just add more of the astringent, vinegar, and all will be "quiet along the Potomac." If it's real bad, or worse than that, add a bit of alum.

It's pretty here on the Gulf, the climate is not bad (about the same as the Dakotas); we have good quarters, good food, good care. Say, if we could hold a dental convention over here in some of these dug-outs and put a dash of Vodka in the coffee. Well, that's what I say, the dental convention would soon be null and void. Remember me to all my friends and tell them on a hot *August day*, I am over here where you can still get a cold bottle of beer. I'm not unlucky, but it's you fellows at home that worry me.

PYORRHEA

The Necessity of Dental and Medical Cooperation.

A. L. BENEDICT, A.M., M.D., F.A.C.P., Buffalo, N. Y.

The author takes exception to the common use of the term "pyorrhea," for caries and minor infections of the gums. His discussion of prophylaxis and methods of treatment from a physician's viewpoint is interesting, and well worthy of consideration.

PYORRHEA alveolaris of marked degree need not be discussed here. Unfortunately the term is often used in a very broad, inclusive sense, which may be correct potentially, but which is not warranted by a literal flow of pus, or even by its probable future occurrence. This use of the term tends to confuse a definite, though not necessarily specific, process with dental caries and minor infections of the gums.


The teeth are, in the main, mesoblastic structures quite comparable to bones. They are unique only in certain chemic and histologic features, but in that they are the only mesoblastic structures of the body not deeply covered and ultimately protected from the outer world by epithelium—the rapidly disappearing initial epithelial covering being practically negligible. The nearest approach to this exposure is found in a remote and entirely different structure and the analogy is lacking in obvious points of similarity. Allusion is made to the indirect communication of the female peritoneum—whose mesoblastic origin is not universally conceded—with the outer air. Otherwise, all mesoblastic tissues are protected from the invasion of bacteria by their more or less deep seated location and ultimately by some form of integu-

ment, skin or mucous membrane consisting of epithelial cells on a foundation of specialized, and more or less complicated layers of mesoblastic structure.

In the case of the teeth, we note that the projecting portions are protected against the outer world—meaning mainly against bacteria—by a highly specialized structure, enamel, to which there is no true analogue elsewhere, while the non-projecting portions are protected as are mesoblastic tissues generally. Both of these methods of protection may be considered as adequate barring inevitable gross traumatism of one kind or another, the risk of lack of defence being such as pertains to the body in general, though perhaps of somewhat higher degree. But, the two methods of defence meet in a mere line, with no overlapping of protective functions, and with a vulnerability in regard to the attack of micro-organisms, in the event of very minor traumatism of mechanic, thermic or chemic nature which are almost inevitable. The fact that dental caries on the one hand and infection of the gums on the other, does not universally occur, can be explained only on the basis of "natural resistance," variously amplified and not very practically elucidated, to cover the actual resistance to bacterial and the prompt healing of lesions. It is the inevitableness—barring these actually unexplained factors—of bac-

terial invasions of both teeth and soft structures, that leads to the objection to the use of the term pyorrhea in the inclusive sense, although the essential analogy of the pathologic processes must be admitted.

Man ceased to be in a state of nature as soon as he became man, but it may be confidently stated that savage men of the Stone Age suffered frequently from all sorts of dental and circum-dental lesions, and that his relative advantage from being approximately in a state of nature was not equal to the advantage of civilized man of the last generation and the present, from the availability of American dentistry.

It may be an impertinence for a physician to express an opinion on a dental subject, especially as the opinion is based on incidental observation of patients and as a patient, rather than on extensive study, but, for what it is worth, the following is offered: Dental caries at the gum line and associated more or less septic lesions of the soft parts are practically inevitable under ordinary existing conditions. The application of silver to very minute dental lesions and the excavation and filling of appreciable cavities as they develop, with regular inspection at periods, of at most a year, are the best methods of treatment and may even be considered prophylactic in a certain sense, even as regards the development of pyorrhea. From favorable personal experience, I am skeptical as to the necessity of sacrificing a tooth on account of temporary septic involvement of the parts, even when an apical abscess is demonstrated radiographically. 

Whether any royal road to efficient prophylaxis, against dental caries or pyorrhea, has been, or will be, discovered, may be doubted. Certain general principles and relatively efficient methods have been established but, on the other hand, the last word has not been uttered. For example, it is pretty generally accepted that antiseptics do more harm than good, not only because they are usually more or less destructive of tissues by virtue of inherent chemic properties but because they diminish "natural resistance." But, whether this objection applies to hydrogen peroxid or analogous bivalent substances which oxidize organic detritus rather than destroy or inhibit bacteria, to sodium bicarbonate, borax, magnesia, etc., which are more or less antacid, should not be decided off-hand. We should neither be therapeutic nihilists nor credulous, nor should we neglect discriminations based on exact studies of individual conditions and actual results.

Notwithstanding the optimistic advertisements of various tooth pastes, and the equally optimistic opinions of dentists with regard to more elaborate prophylactic methods that have the analogy of abrasive cleanliness, it may be questioned whether any abrasive, however mild and fine, or any mechanic abrasive treatment should be used as a routine. Anything that polishes, wears.

¶ A similar problem applies to the gross mechanic removal of debris. We must sail between the Scylla of producing minute lesions, and the Charybdis of allowing putrescible and fermentable debris to accumulate. The metallic tooth pick is unanimously condemned, except as it takes the form of a true dental

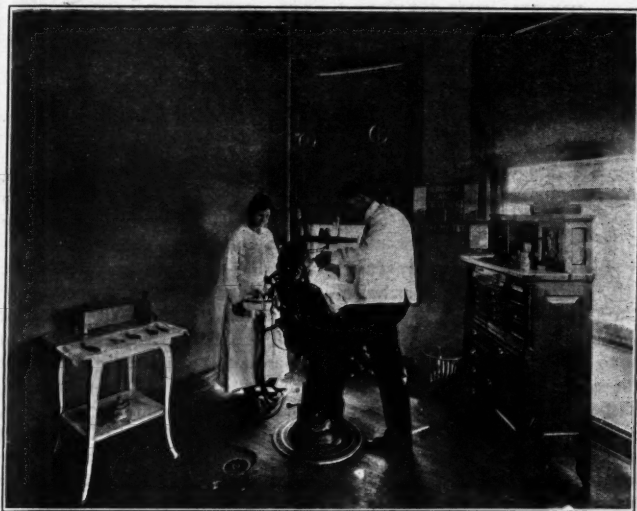
instrument, used occasionally by an expert operator. But the vulnerating power of even wooden and quill picks is frequently demonstrated. Even the tooth brush often produces hemorrhage and therefore lays bare the way to both marginal caries and pyorrhea. But, is the corrugated rubber finger-cot an efficient substitute? Floss, thread and rubber filaments certainly remove debris from tight interdental spaces better than any other means but it is almost impossible to use them constantly without injuring the gums and producing retraction. For example, a case which several dentists had regarded as one of incipient pyorrhea, expressing surprise at the few actual lesions with so marked retraction of the gums, some diagnosing constitutional acidity, showed a disappearance of retraction when a fracture of the jaw with wiring prevented the conscientious practice of threading the teeth.

"Acidity" is regarded by many as the true explanation of marginal lesions and pyorrhea. But under the conditions existing in the mouth, fermentative acidity is of frequent occurrence and considerable duration, and it is by no means established that such acidity is sufficient, either to produce caries chemically or that it indicates the presence of bacteria that will produce either dental caries or suppuration of soft parts. On the contrary, it is claimed that such lesions are rare in peoples that use sugar and starches liberally and that have practically no recourse to dental care. Be this as it may, the diagnosis of "acidity" as a constitutional state, by the mere application of litmus—a very fallacious indicator of acidity even for urinary analysis—is probably in-

correct at least nine times out of ten, on account of this frequent adventitious source of an acid reaction.

¶ There may, or may not, be a relation between pyorrhea, especially in the undeveloped state objected to, and a constitutional superacidity. The truth of the matter can not be determined so long as the dentist who correctly diagnoses and estimates the local lesions of the teeth and gums, makes a snap diagnosis of acidity on general principles, or by applying litmus paper—nor so long as the internist who established the diagnosis of acidosis as accurately as clinical methods yet allow, fails to examine the teeth altogether; or decides from a superficial inspection that there is no need of dental attention, or actually refers the patient for dental care, but gives no information as to the constitutional condition and takes no interest in whether the lesions have any special features, not encountered from various accidental causes.

Here is a neglected opportunity for achieving brilliant results if dentist and physician will work and study together. The advantages of such cooperation may be of the highest practical value. On the other hand, we must recognize the possibility that nothing brilliant or positively valuable will be achieved. Much work may result only in the disappointing discovery that all the alluring generalities about acidity in this connection must be discarded. The writer has in the past devoted many months of labor to somewhat analogous problems, only to find that the hope based on first impressions and superficial observations was not realized and that an attractive theory had to be discarded.



Dental Operating Room At The City Hall, Wichita, Kansas




THE public school clinic of Wichita, Kansas was started originally by the local dental society, but has been taken over by the Board of Education and all expenses are paid out of school funds.

This work, confined to the grade schools is in charge of Dr. H. W. Ralston who spends three and one half days each week at the clinic, caring for an average of twenty-five patients per week. Two more half days are devoted to visiting the schools and inspecting the teeth of the children. Kansas has recently passed a law making the examination of the school children compulsory, and the school board is planning to employ one or two additional dentists to assist in the work.

THE TECHNIQUE OF MOUTH HYGIENE FOR OUR PATIENTS

ARTHUR E. PECK, M. D., D. D. S., Minneapolis, Minn.

The author presents a new method of cleaning the teeth and associate parts. A study of the text and illustrations will repay the reader.

UR first duty to our patients, if they are suffering, is to relieve their pain, then a carefully tabulated examination of their mouths should be made which will enable us to advise them intelligently as to the condition of their mouth and its bearing on their general health.

Each tooth that is dead or suspected of being dead should be tabulated on this chart and radiographed. Each tooth affected with pyorrhea should also be marked on this chart, and all other conditions requiring attention should be carefully recorded.

In order to receive the entire co-operation of our patients we should explain clearly the serious results to their general health of infected areas in the mouth. All infected areas should be eliminated and the mouth placed in a healthy, clean condition. Patients should be requested to bring to you a brush and paste and they should be taught how to use them effectively. When this is done carefully, our patients have received a bit of information which will be used at least twice a day, as long as they live and which will help them to maintain a healthy condition in their mouth.

In the interest of this particular part of our work, I am submitting the following series of cuts which will demonstrate a method for cleaning the teeth and mouth without injuring the soft tissues.

Most people clean only the teeth, but is it not just as reasonable to think that we should clean just the teeth and not the soft tissues surrounding the teeth as it is to think of washing our face and not ears, or our hands and not our wrists? I am sure most of our patients would appreciate our taking sufficient interest in them to make clear to them the technique of this work. Dr. Charters, Dr. Fones and others have worked faithfully along these lines, endeavoring to give to the public something which will benefit their general health, and I believe the profession in general have not given this subject the serious thought it deserves.

Dangerous results can develop by injuring the gums with the infected ends of a tooth brush. A brush which has been used for a few weeks usually contains from one to two millions of germs, and we should explain, clearly to our patients the danger of injuring their gums with these infected bristles.

We would take the necessary steps to avoid infection if our fingers were injured with an instrument covered with infection, but we deliberately allow our patients to use a brush in their mouths whose bristles are covered with infection, without warning them of the danger of injuring the gums.

There is as much logic in causing your gums to bleed while cleaning your teeth and mouth with a tooth brush, as there would be in causing



POSITION 1.



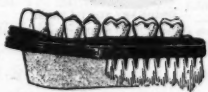
POSITION 2.



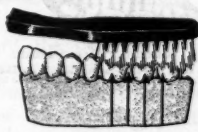
POSITION 3.

The above cross-sectional cuts show the first steps in the new method of cleaning the teeth. To avoid injury and probable infection to the gums use only the sides of the bristles. NEVER ROTATE THE BRUSH so that the ends of the bristles will cause the gums to bleed, as each bristle is usually covered with infection. First wet the brush and cover the end of the bristles with tooth paste, then brush vigorously all chewing surfaces of the teeth.

Repeat all movements described in following cuts AT LEAST THREE TIMES.

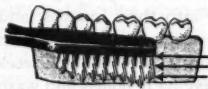


POSITION 4.

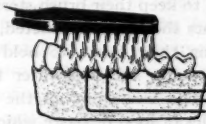


POSITION 5.

Now start on the outside of the lower back teeth, as shown in cuts 1 and 4. (All of the teeth should appear above the back of the brush before raising it to the grinding surfaces. Then tip the back of the brush against the teeth, bringing it into the position shown in cut 2. With the sides of the bristles pressing firmly against the gums, slide the brush straight up to the chewing surfaces of the teeth, as shown in cross-sectional drawing 3 and cut 5. Note direction of arrows. The brush should not be rotated in moving from position 4 to 5, and it should not be drawn diagonally across the teeth as that will prevent the bristles from cleaning between the teeth.

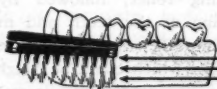


POSITION 6.

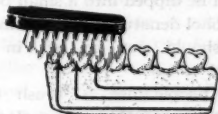


POSITION 7.

Start again with the brush in position 4. Draw brush forward to the eye tooth (noting direction of arrows) to position 8. Then slide the brush to the chewing surfaces as in cuts 6 and 7. Make movements 6 and 7 as one continuous motion.



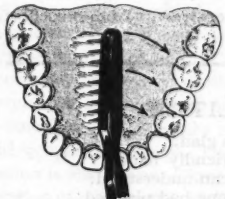
POSITION 8.



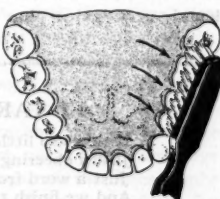
POSITION 9.

In cleaning the front teeth start with the brush in position 4 and follow previous instructions and direction of arrows in cuts 6 and 9.

Use the same movements in cleaning the outside of the upper teeth.



POSITION 10.



POSITION 11.

In brushing the inside of the upper teeth place the side of the brush against the roof of the mouth, as in cut 10. Let the back of the brush lead in a sweeping movement down to the chewing surfaces of the teeth, as in cut 11. This will clean the roof of the mouth as well as the teeth. Reverse the movement in cleaning the teeth on the other side.

Use the same sweeping movement in cleaning the inside of the lower teeth. DO NOT ROTATE THE BRUSH.



POSITION 12.



POSITION 13.

THIS IS VERY IMPORTANT

To clean the approximal surfaces between the teeth, place the side of the brush against the front of the teeth as in position 12. Use sufficient pressure and a slight movement to force the bristles between the teeth as you change the back of the brush to position 13. On the front teeth you should feel the bristles between the teeth with your tongue. While the bristles are in this position use a slight rotary movement to clean these approximal surfaces. Repeat this movement on all the teeth.



CORRECTLY SHAPED BRUSH.



ORDINARY TOOTH BRUSH.

The above cuts show the comparative effectiveness of a tooth brush correctly shaped so that it fits the inside of the teeth as well as the outside. A medium-sized, correctly shaped brush is of great assistance in reaching all the surfaces of all your teeth.

your face to bleed while washing it.

❶ Few dentists explain clearly to their patients the importance of trying to keep their brush sterilized. Patients should be instructed, after cleaning their teeth, to hold their brush under the hot water faucet until it is free from all the small particles of food or paste which can be removed in that way. Then it should be dipped into a small bottle of alcohol denatured with Formalin, and should not be left in the alcohol.

Most people use a brush from three to six months without cleaning it other than holding it under the hot water faucet a moment, because the dental profession has not

explained to them the serious possibilities if the gums are injured. If they could examine this same brush under a microscope they would hesitate before putting so filthy a thing into their mouths, and these same people would object seriously to using a face cloth one week without having it boiled and washed.

The use of the Tongue Scraper should be the first step in the morning toilet, followed by the cleaning of the teeth and mouth. If some efficient system of mouth hygiene, which could be taught the public, was made a requirement for each nurse as well as the dentist, the public would soon receive much greater benefits from our efforts.

IT TAKES SO LITTLE

It takes so little to make us glad,
Just a cheering clasp of a friendly hand,
Just a word from one who can understand;
And we finish the task we long had planned
And we lose the doubt and the fear we had—
So little it takes to make us glad.

—Ida G. Morris

ABSENCE OF ALL SENSATION



CASE of Absence of All Sensation.—

Roberts cites the case of a soldier, aged 37, far removed from the neurotic or hysterical type, whose family and personal history is negative, except for an attack of yellow fever at the age of 17. Since then he has noted absence of all sensation. There is complete absence of both superficial and deep tactile sense over the whole skin surface, and also over mucous membrane, where attainable. There is no consciousness of deep vibration. He does not feel the ground with his feet, and experiences difficulty when walking at night. He says that his inability to bring his heels together at the command "Attention," without controlling the movement with his eyes, had frequently led him into trouble with his drill sergeant. There is complete inability to recognize objects placed in the hand when the eyes are shut. Sense of pain is completely absent. He underwent the radical cure of double inguinal hernia without anesthetic of any kind, being totally unconscious of any sensation either of pain or touch. He never suffers from headache, toothache, abdominal or other visceral pain of any description. The cornea shares in the general anesthesia. Thermal sensation is also absent. There is no perception of temperature in food or drink. There is insensibility to atmospheric changes of temperature.

¶ The muscular sense appears to be completely absent. With the eyes

closed, if asked to make any movement with his arms—the choice of movement being left to him—he is incapable of doing so, saying he cannot tell if his arms are moving or not, and all he can accomplish is a slight convulsive twitching of the hands and arms. On the other hand, if, when standing upright with closed eyes, he be told to walk toward the observer he does so without trouble. He is a good swimmer. The sense of position is absent. He exhibits the phenomenon of the fixation of the limbs in the positions in which they are placed. Sense of taste is completely absent. The sense of smell is practically nonexistent. The fumes of the strong solution of ammonia and of pure hydrochloric acid produce a faint sensation of an odor which the patient remembered to have smelt in his youth.

¶ The only response on both sides to plantar irritation is slight abduction of the little toe. The patellar reflexes were present and normal. The orbicularis palpebrarum muscles contracted on touching the cornea, though no sensation was evoked. The pupils reacted to light and accommodation. The bowels usually act regularly once a day. There is no conscious desire to defecate beyond what he describes as an occasional "rolling" in the abdomen. He never makes any effort, nor is there knowledge of the passage of the feces. Only when there is looseness of the bowels is there any incontinence. Micturition ordinarily occurs during action of the bowels once in twenty-four hours at about 8 o'clock in the morning. There is never a desire to micturate.

¶ Finally, he seems to be without most of the common emotions. He is without family affection. He makes neither friends nor enemies. He has no love of country or home,

but he is a smart and efficient soldier and takes a pride in it. The diagnosis of syringomyelia combined with hysteria is suggested as one which seems to meet the case.



HAMLET'S SOLILOQUY

(Up to date)

[H. M. BREWER, D. D. S., Dayton, Ohio]



O brush or not to brush; that is the question. Whether 't is nobler in the mind to inflict decayed teeth and foul breath upon our outraged friends, or to take a brush against our dental appendages and by vigorous brushing clean them —

¶ To clean; to become filthy no more; and by the cleaning to say we end the toothaches and the thousand natural shocks that the stomach is heir to; 't is a consummation devoutly to be wished —

¶ To decay, to ache perchance to abscess; aye, there 's the rub. For in that abscess of misery what pains may come, until we feel like shuffling off this mortal coil, must give us pause; there 's the swelling that makes calamity of so long a night.

For who would bear the awful soreness and the throbbing pulse, your unbalanced countenance, the proud man's contumely, the pangs of shooting pains, the daylight's delay, the insolence of everybody, and the cold clammy thought of sitting in the torture chair of a heartless dentist, to grunt and moan and sweat under a weary life, but that the dream of something worse than death, the undiscovered country from whose bourne no traveller returns, puzzles the will and makes us rather bear those awful pains, than fly to others that we know not of.

Thus dentists do make cowards of us all; and thus our good old nerve is sicklied o'er with the pale cast of thought and our resolutions of great pitch and moment with this regard get fatally twisted and the poor dentist loses action.



A TEETH MISCELLANY

C. EDGAR THOMAS

The following is from Ash's "Dental Magazine" and is a very readable account of teeth before the time of dentists. The world was at one time without dental attention and modern writers have discovered that it was not a good time to have been born.

NOWADAYS skilled operators, working with fine instruments, aided by anesthetics, have done very much to diminish this ill that flesh is heir to. In the days before dentists, however, toothache was indeed a terrible matter. On one of the Early English capitals in Wells Cathedral is a huge carving representing the contorted face of a man who with one hand is pulling away his cheek from his gums, for all the world as if making way for the insertion of the forceps. This carving is locally known as "The man with the toothache."

In that famous work "The Annals of Japan," written in the eighth century, mention is made of an Emperor whose name, Midzuha-wake, or Prince with Auspicious Tooth, is said to have been given him from his having the so-called teeth in a single piece. A correspondent to *Notes and Queries* a few years ago stated that when he was an infant he had heard his old master narrate that a knight in the Province of Kii, called Hagui Oniemon (Strong-Bites Demon), had a set of teeth of such a conformation that he was able to bite off an iron pan! Again, in the "Life of Pyrrhus," Plutarch says that "instead of teeth in the upper jaw, he had one continued bone, marked with small lines resembling the divisions of a row of teeth."

A later correspondent, writing in the same paper with regard to this matter of the single tooth, stated: "My library of dental works, including periodical literature, is possibly the most extensive in the provinces for a private collection, and though I have heard of such monstrosities. * * I cannot trace any account of them * * * I am strongly of the opinion that what are now separate teeth were at one time a continuous piece of bone, with, of course, their present component parts, such as dentine, cementum, etc."

Herodotus has a passage referring to the subject which states that, after the Persians' overthrow at Platea, among human abnormalities noticed when the dead bodies were bared of flesh "there was discovered a jaw, and the upper jaw had teeth growing in a piece, all in one bone, both the front teeth and the grinders." It should be noted that it was to the upper jaw that the growth of the single tooth was apparently restricted.

An alleged instance of a person possessing one continuous tooth in each jaw occurs in Melanchthon's "De Anima," in the section headed "Vocabula partium corporis humani exteriorum." After mentioning Pyrrhus's case, Melanchthon says, "Et nostra aetate in auli optimi Principis Ernesti Ducis Luneburgensis fuit virgo nata in familia nobili, cui fuit os dentium continuum. Et narrabat Dux Ernestus, ex-

imiam in ea virtutem et gratuita-tem fuisse." The Duke at whose court this young lady displayed her teeth and eminent virtue was Ernest the Confessor, of Brunswick-Luneberg (ob. 1546), ancestor of the Hanoverian line.

In regard to this same matter, an American correspondent mentions that several members in two generations of a certain Connecticut family had no teeth proper. The gums were replaced by an undivided ring of tooth substance, prolonged upwards to the height of ordinary teeth, and were used in all respects as such.

Before now, persons have been credited with having actually been born with teeth, and the ill-famed, crook-backed Richard III. is among these. It should be mentioned, however, that this statement is made almost solely upon the authority of Shakespeare, and it has been suggested that the poet and dramatist was really characterizing some other personage than Richard in his play. Some have expressed the opinion that this characterization refers to the Earl of Salisbury. In Samuel Rawson Gardiner's "History of the Life and Reign of Richard III.," the following passage may be found: "He (Richard) left such a reputation behind him that even his birth was said to have proclaimed him a monster. He had been two years, we are told, in his mother's womb, and was born—or, rather, like Macduff, was by a surgical operation separated from his mother's body, when he came into the world feet foremost—with teeth in his jaws and with hair down to the shoulders."

In Smith's "Mirabeau" it is stated that at his birth that orator "had an immense head, almost

amounting to a deformity; a twisted foot; two molar teeth were found cut, and his tongue was tied to the frænum" — —

A curious tooth story is told by William Hone in his well-known "Table Book:" "In 1593, it was reported that a Silesian child, seven years old, had lost all its teeth, and that a golden tooth had grown in the place of a natural double one. In 1595, Horstius, Professor of Medicine in the University of Helmstadt, wrote the history of this golden tooth. He said it was partially a natural event, and partly miraculous, and that the Almighty had sent it to this child, to console the Christians for their persecution by the Turks. In the same year, Rullandus drew up another account of the golden tooth. Two years afterwards Ingosteterus, another learned man, wrote against the opinion which Rullandus had given on this tooth of gold. Rullandus immediately replied in a most elegant and erudite dissertation. Libavius, a very learned man, compiled all that had been said relative to this tooth, and sub-joined his remarks upon it. Nothing was wanting to recommend these erudite writings to posterity but proof that the tooth was gold: a goldsmith examined it, and found that it was a natural tooth artificially gilt!"

It is on record that some thirty to forty years ago a drain was made across the northern portion of Bottesford churchyard, in which burial-ground no interments had been made for a considerable period—some say since the Reformation.

During the process of the work some thirty skulls were dug up, and by far the greater part of these possessed perfect teeth. Among

them was one remarkably small skull, in which, though every tooth was in its place, and every one of them sound, they were yet all very much worn—so much so as to suggest that the food eaten for many years was of a very hard quality. Specialists who examined the teeth came to the conclusion that the skull belonged to a very old woman.

¶ An interesting little note regarding the drawing of teeth by blacksmiths was contributed to *Notes and Queries* some few years ago by Mr. W. F. Prideaux. He wrote: "I do not know if blacksmiths have yet given up the practice of dentistry in England, but they have not done so in some not very remote parts of Europe. A few years ago, when staying at Vizzavona, in the Corsican hills, my wife suffered considerable inconvenience from a loose tooth, and on inquiring from the excellent patron of the little hotel, M. Baretti, whether there was any dentist nearer than Ajaccio who could relieve her, I was told that there was a good one at Bocognano, a village two or three miles off. He added that, if we liked to try him, his sister was wife of the *maire* of the *commune*, and that she would be glad to receive us. We therefore set off by rail under the guidance of our friend's daughter, a pretty girl of fifteen. On the way Antoinette informed us that the dentist was really an *ouvrier*, and on further inquiry we discovered he was the village farrier. Arriving at Bocognano, we were received by the Mayor in a very kind and hospitable manner, and while we were discussing coffee and cakes in her little salon she sent for the dentist, who, however, did not turn up, as he had gone to Ajaccio for the day. Our

trepidation being quite removed by this good news, we spent a pleasant afternoon with our kind friends, and the next morning my wife, taking her courage in both hands, dislodged the tooth herself. On the blacksmith's presenting himself, we were therefore enabled to tell him that his services were no longer required. What his dental armoury consisted of I cannot say, but from what we heard at Bocognano he seems to have been a skilful practitioner." ❧ ❧

In the past much controversy has centered round the question as to whether the Greek physicians extracted teeth. That the Egyptians paid much attention to the care and preservation of the teeth is vouched for by Herodotus: "The art of medicine is thus divided amongst them (the Egyptians): each physician applies himself to one disease only, and no more. All places abound in physicians; some physicians are for the eyes, others for the head, others for the teeth, and others for internal disorders." These old Egyptians could hardly have used surgical instruments made of steel, however, for none of their dental apparatus has come down to us, although the number of various other utensils which have been preserved is very great. Another passage worth attention is that of Hippocrates, wherein he speaks of the maladies of the teeth to wit: "With a child suffering from phagedenic affection, the tooth fell out, as the bone (jaw) had become hollow. The wife of Aspasias had violent toothache; the jaw swelled; having used a collutorium of castorium and pepper, she was relieved." Again, in another place, the same writer observes: "Melesander, the gums being af-

fect, swollen, and very painful, he was bled on the arm; Egyptian alum helps at the outset." Elsewhere, Hippocrates has also written: "At Candia, the child of Metradorus, in consequence of toothache, had a sphacelus of the jaw; overgrowing flesh on the gums, the suppuration was middling, the molar teeth and jaw fell (off)."

So far, although some grave instances of teeth trouble are referred to, there is no mention of extraction, although there was every indication of this practice. However, an old text of Cælius Aurelianus refers to tablets and presents offered to the Greek temples by grateful patients who had been cured of their maladies. The passage runs: "Even surgical instruments were bequeathed by the inventors to these sacred shrines of Medicine. Thus, Erasistratus presented to the Delphic Temple of Apollo an instrument for extracting teeth."

The Greek writer Galen also gives some useful information concerning the teeth: "This you will discover in the food which is left in the intervals between the teeth, and which remains there all night;" while in the works of Paulus Ægineta we may light upon a whole chapter "on the extraction of the teeth." It is thus perfectly clear that the Greeks were not only acquainted with the art of extracting teeth, but there is plenty of evidence to prove that they were proficient in the making of false ones, and the stopping of decayed ones with gold.

Similarly, the Romans were also skilled in dental practice, for not only did many of them—especially the ladies—wear false hair—for the truth of which there is abundant evidence in the writings of their

poets—but from the following epigram of Martial it would appear that false teeth were also in use:—

In Laeliam

Dentibus atque comis, nec te pudet,
uteris emptis;
Quid facies oculo, Laelia? non emittur.

Further, it is on record that Roman skulls have been exhumed containing false teeth, fashioned out of ivory and box. Then, if further proof be needed, there are the "Laws of the Twelve Tables," No. 10 of which forbids useless extravagance at funerals in general, while No. 11, as an exception, allows that the gold settings of false teeth, or the gold with which they were bound, should be buried or burnt with the deceased. This establishes the fact beyond dispute that false teeth mounted in some manner in gold were in common use among the Romans at an early period. The precise terms of the Law are as follows: "XI. Neve aurum addito: ast quoi auro dentes vincti erunt, im cum illo sepelire et urere, se fraude esto." A comparison may also be made with Horace:—

At illæ currere in urbem,
Candidæ dentes excidere . . .

The use of mineral teeth, or, as they were originally advertised, "incorruptible mineral teeth," dates from about a hundred years ago—at least in this country, for at that time the first advertisements regarding them began to appear. They were formed of a species of semi-opaque enamel, and their manufacture, with the lapse of time, has now reached a very high degree of excellence. An incidental notice of their employment much earlier than their commercial development dates from 1735: "Lord Harvey has the finest set of Egyptian teeth as ever

you saw." This is an extract from a letter sent by the Duchess of Portland to Mrs. Catherine Collingwood, and dated from Bullstrode, Dec. 1st, 1735.

In connection with the stopping of teeth by the Egyptians, an interesting little note may be found in Sir J. Gardner Wilkinson's "Popular Account of the Ancient Egyptians," in 1874. "And it is a singular fact that dentists adopted a method not very long practised in Europe of stopping teeth with gold, proofs of which have been obtained from some mummies of Thebes."

Teeth play a very important part in connection with the religious rites and ceremonies of native tribes, and like many other things, possess a superstition and magic all their own. The teeth of the pagan races of the Malay Peninsula are usually very good, and are seldom attacked by caries. In Semang the custom is to file them—generally half a dozen of the front teeth; while the Jukuns file theirs to a small point. Indeed, the filling of the teeth is also much resorted to by the Pacific tribes. The natives of Panuco—one of the wild Mexican tribes—for many years, even after the Spanish conquest, filed their teeth, bored holes in them, and dyed them black. This peculiar practice of filing also prevailed to a great extent among the women of Yucatan, whose ideal of dental charms rendered a saw-like arrangement desirable. This operation was performed by certain old women professors of the art, by means of sharp gritty stones and water. Among the Lacandones—a wild tribe of Central America—it is the custom to invest the chief with lion skins, and a collar of human teeth, as a tribute to his greatness;

while the Isthmians, another aboriginal tribe of the Pacific, are noted for excellent teeth, and cherish the custom of wearing teeth of all descriptions—animal as well as human—as ornaments. Many other tribes clean their teeth and paint them with cochineal, and the Otomis dye them black.

Tlaloc, a great tribal dignitary, was the god of water and rain, and the great fertilizer of the earth. Grotesque and hideous as his appearance is said to have been, his image is chiefly interesting to us from the fact that in his mouth were only three grinders, while his front teeth were painted red!

The New Mexicans are noted for white and evenly set teeth; but the Chinooks, a Columbian tribe, are chiefly remarkable for very irregular and much-worn dental ornaments. Vancouver, the traveller who made many journeys among the various Californian tribes, invariably found that all the teeth of both sexes were by some process ground down uniformly and horizontally to the gums. The women especially carried the fashion to an extreme length, reducing their teeth to even below this level. The Hyperboreans—a term given to those Pacific Island nations whose territory lies north of the 55th parallel—possess regular teeth, but from the nature of their food, and the practice of preparing hides by chewing, they are worn down almost to the gums at a very early age. In this respect the Columbians have frequently worn their teeth down to the gums through eating sanded salmon. The salmon is opened, and the entrails, backbone, and head removed before drying. During the latter process, sand is blown over the fish, and as a consequence the

teeth of the eater are almost worn down. It is significant that almost all travellers emphasize this point, and trace the cause to the eating of

sanded salmon. The teeth of the natives are as a rule regular, but stumpy, and deficient in enamel at the points.



FEDERAL HILL SCHOOL REPORT

RUBY B. STEELE, Dental Nurse, Bristol, Conn.

DURING the past year the teeth of the children in the first three grades have been cleaned twice, instructions in brushing and home care have been given, and parents have been notified of cavities in the teeth needing attention. ¶ The first examination was as follows:

Number of mouths examined, 146.
Condition of teeth, clean 17—fair 102—dirty 27.

Use of brush, daily 59—occasionally 61—never 26.

Out of 454 six year molars 81 were decayed—17½ per cent.

Out of 2139 temporary teeth 732 were decayed—34¼ per cent.

¶ The comparison of the six year molars in the grades is as follows:
In the 1st grade at 6 years of age 8 per cent.

In the 2nd grade at 7½ years 18 per cent.

In the 3rd grade at 8 years 27½ per cent.

Of the temporary teeth:

In the 1st grade 27 per cent were decayed.

In the 2nd grade 40 per cent were decayed.

In the 3rd grade 38½ per cent were decayed.

The second examination shows:
Number of mouths examined, 152.
Condition of teeth, clean 19—fair 115—dirty 18.

Use of brush, daily 69—occasionally 56—never 27.

Out of 554 six year molars 117 were decayed—21 per cent.

Out of 2046 temporary teeth present 837 were decayed—40 per cent.

¶ The comparison of the six year molars in the second examination showed:

In the 1st grade at 6½ years 8½ per cent decayed.

In the 2nd grade at 7¾ years 25 per cent decayed.

In the 3rd grade at 9 years 36 per cent decayed.

Of the temporary teeth:

In the 1st grade 32 per cent decayed.

In the 2nd grade 47 per cent decayed.

In the 3rd grade 59 per cent decayed.

This is the end of the third year of dental hygiene in the Federal Hill School and nearly one thousand mouths have been examined in that time. It may be interesting to make some comparisons.

In the first grade in 1917, 17 per cent of the six year molars were decayed.

In the first grade in 1919, $8\frac{1}{2}$ per cent of the six year molars were decayed.

In the second grade in 1917, 28 per cent of the six year molars were decayed.

In 1919, 25 per cent of the six year molars were decayed.

In the third grade in 1917, 49 per cent were decayed, in 1919, 36 per cent. The children in the third grade have had three years of dental hygiene.

In comparing the condition and brushing of 1917 with 1919 we see the following:

No. Examined		Condition			Use of Brush		
		clean	fair	dirty	daily	occasionally	never
1917	211	18	83	115	66	85	69
1919	252	19	115	18	69	56	27

The mouths of the children in the backward room were examined and the conditions there, were not as bad as I expected to find. The mouths were very dirty but the teeth not badly decayed. The examination shows:

Brushing in room 10.

Condition, Clean 0—fair 4—dirty 6.

Use of brush, daily 1—occasionally 7—never 2.

Out of 267 permanent teeth 44 were decayed—16 per cent.

The retarded pupils in the Bridgeport schools are 50 per cent less than five years ago. We feel that a great deal, if not all of this, is due to the extensive dental hygiene that has been carried on there for five years.

Although notices were sent to the parents of all children telling them of the need of dental attention, only twelve visited their dentists between the first and second

examination. There is a need of more propaganda for both parents and children. It is hoped that next year short lectures can be given the children, and some lantern slides may be borrowed which would show the children more plainly what happens from neglect. Such lectures with the slides may be rented for a very small amount and would be splendid to use when the pupils are having assembly.

Some literature for the children to take home to their parents would be an excellent thing, as we must instruct the parents as well as the

children, if we wish to gain our objective.

The care of the teeth is needed not only in the Federal Hill School but in all the schools of Bristol. We are boosting our city in many ways to make it bigger and we want a better Bristol, too. Why not make it better by taking care of the needs of our coming citizens and make them healthy and intelligent?

Dental Hygiene is spreading surely and rapidly over our country and we hope that we shall not be far behind other progressive cities in caring for our school children's teeth. I hope that this work may be continued on a larger scale next year and in years to come. When all school children have sound and healthy teeth we shall not feel that we were entirely behind the times for having started our work when we did.

A COMMUNICATION FROM DR. ERNST JESSEN

The following letter received from Dr. Ernst Jessen, father of the school dental clinics of Europe, and head of the work at Strassburg, France, is of great interest.

In a former number we described the dental clinic at Strassburg, which was in connection with the Public Baths. The Strassburg School Dental Clinic was the result of humble beginnings, and, due to the efforts of Dr. Jessen, developed into one of the great dental school clinics of Europe, an inspiration to every country, especially America.

Up to the time of the establishment of the Forsyth and Eastman Dispensaries, the work at Strassburg, with its building costing \$60,000, was a model. At the opening of the war we tried to get in communication with Dr. Jessen. Several of our letters were returned as unmailable.

As stated in his letter, seventy-five dentists and equally as many technologists (mechanical dentists) treated from 200 to 250 soldiers daily. In addition they had a hospital with 250 beds, caring for jaw wounds. The work at Strassburg was under the direct encouragement of the German Government, and undoubtedly its strategic position in case of war was considered in extending this support.

Dr. Jessen writes from Basel, Switzerland, where he has fled since the French captured the city of Strassburg, and hopes to establish a dental school clinic in that city. He encloses a number of clippings, which are here presented. It is hoped that the Doctor will receive every encouragement to continue his good work, and that it will be so recognized in Basel.



Y Worthy Colleague:

Your kind letter of Jan. 22nd duly received. I have been driven out of Strassburg, where my work has been destroyed, and have taken up my residence in hospitable Switzerland, where I hope to be able to again take up my vocation.

Following an invitation of the authorities, I have delivered an address here. Am enclosing an article regarding the same, which you may be able to use in *Oral Hygiene*.

The dental school clinic served for military purposes during the war. Seventy-five dentists and equally as many technologists treated 200-250 soldiers daily. In addition we had a hospital with 250 beds caring for jaw wounds.

After the French broke in, the

clinic was closed and all professors of the university were driven out. Hence "The Strassburg Dental School Clinic" is no longer in existence. Possibly it will again come to life in Switzerland.

Heartiest greetings to all my sympathetic colleagues in America.

Prof. Dr. Ernst Jessen.

St. Chrischona,

Basel, Switzerland.

6-2-'19.

THE ARRANGING AND CONDUCTING OF A DENTAL SCHOOL CLINIC

As may be seen from the heading, the educational department has arranged for an illustrated lecture by Prof. Dr. Jessen, previously principal of the Dental School Clinic in Strassburg, on May 26, 1919, at 6 P. M. in the large auditorium of the Bernullianum. The topic for discussion will be: "The Opening and Conducting of a Dental School Clinic and its Importance for

the people." An open debate will follow. The meeting is open to the public; but the privilege of the open discussion shall be given to the leaders, teachers, dentists, doctors, and others who are interested. Owing to war-time conditions, the proposed clinic in Basel has not yet been opened, but since the rooms for its location are to be had in No. 24 Albangraban Bldg., and the need of such an institution is being felt more and more, it is intended to place the matter before the Government, so that the school may be opened immediately after the expiration of the Referendum.

BASEL

THE DENTAL SCHOOL CLINIC

Owing to the fact that a Dental Clinic is very shortly to be opened for the school children of Basel, the educational department has called upon a recognized authority in this sphere in the person of Prof. Dr. Jessen, recent conductor of The Strassburg Dental School Clinic. Dr. Jessen spoke to a large assembly of the authorities, teachers, and dentists on Monday evening in the Bernullianum on the conducting of the modern school just opened under his leadership. The Superintendent of the Educational Department, the Hon. Dr. Fritz Hauser opened the meeting with a few words of greeting and introduction. Prof. Jessen then spoke with sympathetic interest and intelligence. The development of medical science has also brought dentistry its importance. Statistics show that 80-90 per cent of children have diseased teeth and that 15-35 per cent of these teeth are affected. Abnormal mastication with its harmful results, poor ventilation in school rooms to the detriment of

scholars and teachers, decay of teeth as a conductor of infectious diseases, especially of tuberculosis, weak constitutions resulting from poor mastication, offering favorable conditions for infectious diseases in the scarcely resistible body of the child, these are the noticeable results from lack of attention to teeth. Regular dental attention does away with these conditions, and therefore it has become quite necessary to have the dental clinic which gives children the opportunity, yes, compels them, to keep their mouths in a healthy condition with little or no cost whatever. The beginning was made on a very small scale, but first results forced the city of Strassburg to aid the work to a much greater extent. Finally, a new building had to be erected for the work of the clinic, in which past experiences rendered great assistance. The new "Strassburg Dental School Clinic" will answer all architectural, hygienic, medical and modern needs. It is always understood that an institution of this nature be conducted under jurisdiction of the city, and be financially supported by the same, for in this manner alone, where city and school administration, teachers and dentists work in harmony, can there be permanent success. Strassburg had its first dental school clinic in the year 1902. ¶ It does not suffice that in a school of this nature only the children with defective teeth are cared for. There must be some systematic method for investigation and carrying out of plans. The work must go to the very bottom of things. For this reason, for instance, all public schools of Strassburg were under the jurisdiction of the dental school clinic. All children, even the very smallest,

very willingly came to the clinic for examination and attention. Finally the sympathy for the work went so far as to grant the children percentage in their standing in school for the condition of their teeth.

In a series of photographs on the screen, Prof. Jessen illustrated the arrangement of the various rooms of the Strassburg Dental School Clinic. At the same time he related very interesting statistics on the spread of tooth diseases, showing the photographs of healthy and diseased teeth and of complete jaws with the various methods of treating the same. The total cost for up-keep of the school in Strassburg amounted to twenty-five to twenty-six thousand marks. The children themselves contributed one mark annually toward the running expense. The Hon. Dr. Fritz Hausen thanked the speaker for his interesting words, and then opened the discussion. The need of the dental school clinic was repeatedly expressed on the part

of the teachers and medical doctors. Prof. Jessen briefly closed the meeting.

In the report on the lecture in the Bernullianum on May 26th, in the number of *The Baseler Nachricht* of Thursday, two errors, which in some way crept in, are here corrected:


1. Strassburg did not open a dental school clinic in 1892, after which 220 such institutions were opened, but after long preparation, as early as 1887, Strassburg in 1892 was the first city to contribute toward this work, and in 1902 became the first city to have such an institution. Up to the time of the war, about ten years, this example was followed by 220 other cities of Germany.
2. In many of these cities, the children which were treated, contributed one mark annually. In Strassburg the treatment was always gratis to children.



The Metropolitan Life Insurance Company of New York City has issued an edict that dental examination is now a requirement of employment in that institution, reading as follows.... "The services rendered by the Dental Division since its establishment in 1915 have been so curative of impaired health conditions and so permanently helpful to the employees who have taken advantage of the opportunities offered, that henceforth every Home Office employee will be required to undergo examination and cleansing of the teeth in the Home Office Dental Division twice a year. If the service of the family dentist is desired rather than that of the Home Office dentists, such examinations and cleansings by him will be accepted, but they must be procured without expense to the company and the employee must furnish a satisfactory certificate from him that the required work has been done." This we believe is the first time in the world that such a requirement has ever been made by any large company.

PHYSIOLOGIC COST OF CHEWING

The following is an editorial from the July 12, 1919, issue of "The Journal of the American Medical Association." The author does not believe in the teachings of Horace Fletcher, and does not hesitate to say so. He also gives his reasons. The article is short, and will bear close study.

HE act of mastication has lately attained new prominence in human physiologic routine from two different circumstances: first, the vigorous advocacy of thorough mastication as the basis to hygienic well-being. It is largely owing to the propagandist energies of the late Mr. Horace Fletcher that the doctrine of deliberate mastication has been widely preached; and 'fletcherism' has gained many adherents among that omnipresent group which is searching for the secret of a better existence through improved health. One of the claims made in favor of thorough mastication as advocated by Fletcher is that the extreme comminution of the food and the more effective insalivation promote the digestion and utilization of the nutrients. Despite the plausibility of this argument there is an abundance of experimental evidence to show that the nutrients in the common food products are absorbed in large measure even under ordinary habits of eating. It is exceptional to find less than 90 per cent of the digestible nutrients utilized; and for the familiar fats and carbohydrates the records approach almost perfection. The residual fecal masses are normally devoid of more than small quantities of digestible nutrients. That which constitutes the output by the bowel comprises indigestible residues, refuse matter from ali-

mentary secretions, and bacterial residues. These are not utilized nutrients. Furthermore, comparative investigations of the actual utilization of the nutrients, by persons who on one occasion 'bolted' and on another occasion 'fletcherized' the same diets, have given no experimental justification for the assumption of improved absorption as the effect of the more thorough mastication. Obviously it is a physiologic desideratum to comminute moderately at least some of the meats and carbohydrate foods that enter into the customary human dietary. In certain diseased conditions, comminution of the food is an indispensable requisite. However, so far as the faddist features and the extreme claims of unique benefits are concerned, we cannot forego quoting the remark of an extremist in the other direction. 'Fletcherism,' he writes, is permissible in those easy-going lackadaisical individuals whose tastes are gently Epicurean and who possess the desires of a Lucullus minus the means. Let those benighted harmless souls chew and champ to their hearts' content, for they, poor beings, need some fad, and this one can harm no one, unless it be themselves. But to busy men who are shouldering the cares of government, commerce and science and whose strenuous impetuosity moves them to act quickly, whose every act is intense and every movement a flash—to such individuals, fletcherism is a thorn in the flesh.

"In the second place, mastication has become conspicuous in this country through the widespread use of chewing gum. Some time ago a distinguished chemist remarked in a public address that if the Rockefeller Institute is spending to good advantage about half a million dollars per annum for medical research, the chewing gum bill of the United States would easily support half a dozen Rockefeller Institutes. Coaxed by the insidious suggestions of advertisements and encouraged by the public example of bankers and ministers, physicians and judges, men and women from all classes have joined the ranks of the mastication army. The lasting odor of mint has begun to compete with that of onions and garlic in certain groups of our population. We shall not venture to discuss the alleged virtues of chewing gum. The reports of its help in allaying thirst for the boys in the trenches can scarcely be used in support of the use of chewing gum in the ordinary walks of life. Nor can the alleged

presence of pepsin in certain brands be emphasized as a universal panacea. Amid all the uncertainty as to the physiologic effects of chewing gum one fact has been clearly demonstrated. Benedict and Carpenter of the Nutrition Laboratory of the Carnegie Institution of Washington, in Boston have found that as a result of chewing gum the basal metabolism may be increased more than 17 per cent.

"This has a further bearing on the doctrine of 'fletcherizing.' If prolonged mastication can necessitate an excess heat production equivalent to nearly one-fifth of the basal metabolism, it is easily seen, to quote the Boston physiologists, that any advance gained from a possible increase in the digestibility of the food is more than compensated by the increase in heat production. The conception, they add, of an increase in the digestibility and in the utilization of the energy of foodstuffs as a result of prolonged mastication thus finds no support in fact."



¶ At the meeting of the Board of Aldermen of the City of New York, which was held July 1, 1919, the dental ordinance introduced by Alderman Dr. Morris S. Calman was favorably acted upon and referred to Dr. Royal S. Copeland, Health Commissioner, for action.

¶ In a letter dated the 17th of July, Dr. Copeland writes to Dr. Calman as follows:

"My dear Alderman:

"In the budget for 1920 I am asking for nine additional dentists and eighteen dental hygienists, and I shall greatly appreciate it if you will use your influence to assist in getting the matter through. I am glad to know that your ordinance passed the Board of Aldermen, and you may depend on it that I shall be governed accordingly.

"I am heartily in favor of this whole program, and hope to see the dental problems more energetically met by the City of New York. I look forward to the time when there will be a dental office in every public school in the city, which at regular intervals will be used by the officials of the departments of health to correct dental defects as found among children attending school."

THUS TRANSITORY IS MAN



THUS transitory is man. Like the flower that blooms in the morning, and in the evening is withered and trodden under foot, one generation after another passes away like the waves of a rapid river; and Time rushing on with silent but irresistible speed, carries with him all that can best portend to permanence and stability.

Even thou, oh, my friend, alas, even thou, who art now happy in the vigour and vivacity of youth shall find this lovely season, so fruitful of delight, like a transient flower that fades as soon as it is blown.

Without having been conscious that thou wert changing, thou wilt perceive thyself changed. The train of graces, and pleasures, that now sport around thee—health, vigour, and joy, shall vanish like the phantoms of a dream, and leave thee nothing but a mournful remembrance that they once were thine.

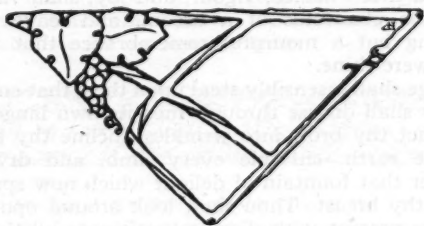
Old age shall insensibly steal upon thee, that enemy of joy shall diffuse through thee its own langours, contract thy brow into wrinkles, incline thy body to the earth, enfeeble every limb, and dry up forever that fountain of delight which now springs from thy breast. Thou shalt look around upon all that is present with disgust; anticipate all that is future with dread, and retain thy sensibility only for pain and anguish.

This time appears to thee to be far distant, but, alas, thou art deceived. It approaches with irresistible rapidity, and is therefore at hand. That which draws near so fast can never be remote, and the present, forever flying is remote already. Even while we speak it is past and returns no more.

—Fenelon

THE MAN WHO HAS THE MOST TIME ON HIS HANDS ACCOMPLISHES THE LEAST, AND BECAUSE HE FAILS TO DO THINGS IS EXACTLY WHY HE HAS SO MUCH TIME ON HIS HANDS. IF YOU WANT ANYTHING DONE AND DONE RIGHT AWAY, GET A BUSY MAN TO DO IT.

—THE SILENT PARTNER



EDITORIAL

WM. W. BELCHER, D. D. S., *Editor*

186 ALEXANDER ST., ROCHESTER, N. Y.

Oral Hygiene does not publish Society Announcements, Personals or Book Reviews. This policy is made necessary by the limited size and wide circulation of the magazine.

FOREWORD



YOU are asked to loyally support this magazine in its campaign of publicity to educate the laity. We have ardently wished for this service; now that it is at hand let us all cooperate to make it a grand success, that the people shall know and realize that the proper care of the teeth is an insurance against disease and will pay substantial dividends in increased health and efficiency.

¶ The great war was fought and won for the sake of the children—the men and women of tomorrow. It is our duty to the child to assure the best possible physical and economic surroundings, to provide every means of growth and development of a healthy and perfect body. While other factors enter into this field, nothing is of greater importance than the proper care and protection of the teeth and mouth of the rising generation.

CAMPAIGN TO EDUCATE THE LAITY



WITH this number, as announced in another section of the magazine, *Oral Hygiene* enters upon its self-appointed task of educating the laity. This we consider quite the most important contribution to the advancement of dentistry that has ever been conceived.

People have been advertised into the purchasing of automobiles and other luxuries while dentistry, one of the essentials, has been neglected. I have been surprised at the number of ethical men tempted to enter the advertising field, not to exploit their own achievements, but the truths of modern dentistry. With a few exceptions, the only information the general public has received is that which the quacks have given them through the public press and the weekly horrors with their illustrations of half truths.

Where shall we begin in this education of the public? What better source than the daily and weekly newspapers of the country, of which there are, as announced in a previous editorial, 2,562 daily and 15,735 weekly papers. This must be a national undertaking. The articles should be of an ethical nature, although all are not agreed as to what constitutes ethics. The larger number of dentists you get together the less they can agree as to what are essentials. Briefly, the plan is to prepare a series of short, readable articles for the public press covering a period of at least a year. Such articles should appear daily, be well written and truthful. Where shall we find the man who is competent to do this work? This entails not only an initial expenditure of time but also money.

Lt. Colonel Rea P. McGee, M. D., D. D. S., one of our contributing editors, will have charge of the campaign of publicity. Under his direction, with the cooperation of this magazine and the dental profession, the plan promises to be a great success.

¶ The power of the public press is unlimited. Soldiers were advertised into the army. A most effective poster was that of a recruiting officer with pointed finger, "I want you." Money was advertised into the Treasury; ships were advertised into the water; aeroplanes were advertised into the air; we advertised ourselves into an unpopular war; a series of Liberty Loans and Thrift Stamps, totaling billions of dollars, were advertised and successfully placed on the market.

It has been well said that the dental profession, if united, could elect a president of the United States. When a man is in a dentist's chair he is in good health or he would not be there. Dentists and dental societies in various sections of the country, through the pages of *Oral Hygiene*, and, I trust, other

magazines in the field, will be urged to organize for the purpose of bringing pressure to bear upon local publishers inducing them to subscribe to this service.

Only ten per cent of the public are at present patronizing the dentist. What have we done to educate them? What do they know of modern dentistry, the evils of dead teeth, focal infection, heart and other complications too numerous to mention? Very little, indeed. If parents realized for a moment the need of these things do you suppose that if they loved their children they would neglect them? Surely not. Dentists have other things to do besides making a living. One is to inform the public of these conditions and if then the parents wilfully neglect the children's happiness, comfort and future welfare they alone are to blame. Until such time as we educate them as to this need, we are the guilty parties.

Oral Hygiene is prepared to finance the enterprise in its entirety. No one is seeking personal profit. It is only asked that the service be self-supporting. But, whether or not this is true, it will be in operation and the matter of its being self-supporting is of small consequence.

It is the purpose of *Oral Hygiene* to offer this service to editors of daily and weekly papers in the United States, at a nominal price. It is up to the dental profession to demand the same of their local papers, which can secure the service through the McClure Newspaper Syndicate. There is no question but they are the largest people in the newspaper syndicating business. They are, also, the oldest, and originators of the syndicating idea. Under their plan of operation they will sell this service to only one paper in each town. The address of the McClure Newspaper Syndicate is 373 Fourth Avenue, New York City.

The great war was fought and won for the sake of the children—the men and women of tomorrow. It is our duty to the child to assure the best possible physical and economic surroundings, to provide every means for growth and development of a healthy and perfect body. While other factors enter into this field, nothing is of greater importance than the proper care and protection of the teeth and mouth of the rising generation.

We have ardently wished for this service; now that it is at hand let us all cooperate to make it a grand success that the people shall know and realize that the proper care of the mouth is an insurance against disease and will pay substantial dividends in increased health and efficiency. You are asked to loyally support this magazine in its campaign of publicity.

OUR NEW EDITORS



WITH this number the editor enters upon his sixth year of service. During the five years past the work has doubled; also he has charge of the South American publication, *The International Dental Journal*, printed in Spanish and Portuguese. Correspondence, traveling, proofreading, and planning for future editions of both magazines entail a large amount of work. With magazines as with individuals there is no standing still; it is either to advance or retreat. With *Oral Hygiene* it is to advance. To relieve the editor of part of his duties so that he can give attention to other details, with this issue is added two contributing editors, namely, Rea P. McGee, M.D., D.D.S., Denver, Col., and Howard R. Raper, D.D.S., Indianapolis, Ind., also a new editor of the Funny Page, Mr. George L. Kinter. These men are to be contributing editors in all that the word implies. Their appointment is not for an ornamental purpose in the least degree.

Dr. McGee will have charge of the publicity campaign and you have a taste of his quality in the article appearing under his name in this issue. Before entering college he was engaged on several newspapers, including the *Denver Post* and *Rocky Mountain News*, which gives him a proper perspective on the character of dental stories that will appeal to the public and in addition to being a Doctor of Dental Surgery he is an M.D., being a graduate of the Denver Homeopathic College of Medicine and also the Denver College of Physicians and Surgeons. He is also a member of the Colorado State Dental Association, the Denver Dental Association, the County Medical Surgeons of Denver, the Colorado State Medical Society, the American Association of Military Dental Surgeons, the American Medical State Association and the American Institute of Homeopathy. He has also been a member of the Colorado State Board of Dental Examiners, served as president of the Denver Dental Association and is Associate Professor of Oral Surgery in the University of Denver.

In the world conflict he was one of the first to volunteer and on June 12, 1917, he received a commission as First Lieutenant in the Dental Reserve Corps, being the first dentist west of the Mississippi to obtain this honor. After serving in an advisory capacity under Captain J. R. Bernheim, Chief of the Dental Service for the western states, in November, 1917, he was ordered to St. Louis to attend the Military School of Tactics and Oral Surgery at Washington University. On March 17, 1918, he was ordered to Washington Barracks, Washington, D. C. He was then promoted to the rank of Major on March

28, 1918, and ordered to New York to join the Maxillo-Facial Unit under Major V. P. Blair and sailed for France on April 4, landing at Brest April 17, and with a number of other officers was ordered to London, England, where he served on the staff of the Queen's Hospital. On July 2, he joined the United States Mobile Hospital, No. 1, as Chief of the Maxillo-Facial Service at Chateau-Thierry, France and served at the front in counter-defensive on the Marne with the first army. On August 27, with his unit, he was transferred to the Verdun sector and was present at the battle of St. Mihiel and following this successful drive was transferred to Laclaire Chene for preliminary operations in the Argonne Forest.

Following cessation of hostilities his unit was stationed at various points in France. On February 17, 1919, he was promoted to the rank of Lieutenant-Colonel, being one of the nine members of the dental corps, consisting of some five thousand men, to receive that honor and returned to the United States on April 8, since which time he has served as Chief of Dental Surgeons and of Dental Oral Surgery Service at the United States General Hospital, No. 40, at St. Louis, Missouri.

Howard Riley Raper, D.D.S., is author of a standard textbook, "Elementary and Dental Radiography." He is professor of Roentgenology, Operative Technique, Materia Medica and Therapeutics, at the Indiana Dental College, Indianapolis, Indiana; Past Dental Surgeon to the Indiana School for the Feeble-Minded Youth; member of American Institute of Dental Teachers, local, state, and national dental societies; First District Dental Society of the State of New York; Western Roentgen Ray Society; Associate Fellow A.M.A., Section of Stomatology, etc.

He will supply us with a series of up-to-date articles on the X-ray, its use and development, or any other subject that may appeal to him. He is an author of no little merit and has the gift of making his subject clear, concise and most readable. To those acquainted with his writings, he needs no introduction, to others not so favored, we would say that you will soon have an opportunity to judge for yourself.

Mr. George L. Kinter, who will have charge of the Funny Page, possesses an abundant fund of humor and is well fitted for the position. Under his direction this page will take on new life and you are invited to cooperate with him to this end.



STANDARDIZATION



STANDARDIZATION has a new significance since the commencement of the war. We have learned to standardize our shipbuilding. Why should every ship be of different dimensions, and a different design necessary? We have learned to standardize everything else, even automobiles, and a plan that has worked out so well in fresh water is entitled to a little salt air.

The Shipbuilding Commission found it necessary if they got out ships in record time to standardize all designs. If we could employ this method in building typewriters, rifles and sewing machines, why not apply it to other products.


In years past it was every man's privilege when building a house to do as he pleased. If he liked cupolas, domes, ornate carved pillars and embroidery jig-saw features, if he must have something different, he went to it, and the result was not pleasing.

Before the war we had 5,710 different kinds of pocket-knives. Why was this? Nobody knows. The War Board reduced these to 250 in number.

Also be it known there were 207 different kinds of lawn mowers; now there are six different patterns. One of the most far-reaching and remarkable results of the war was in the furniture business. The War Industries Board, acting in connection with the Council of National Defence, consulted with the representatives of all great business interests, and advised them all how they could cut down expenses and save men and money, for the country's service.

Before the war there were thousands and thousands of designs in furniture to choose from. They cut down the number of patterns, and during the war saved so much in material and money they voted to keep to this order of things, and never go back to the pre-war conditions.

A similar economy was effected in the paint business, in eliminating small size packages. Now all has been changed, and a number of standardized sizes only are marketed.

In making out a schedule for the Army dental equipment, it was necessary to standardize the instruments, to specify what should and should not be used. A few decades ago one of our largest manufacturers standardized, or attempted to do so, the manufacture of steel instruments, throwing out many forms that had crept into use, and duplicates of well-known sets 

Much could be done to improve present conditions, and many of our steel instruments could be abandoned to the advantage of all concerned, as one becomes skilled, he uses fewer and fewer

sizes and shapes. One manufacturer of teeth is attempting to standardize the same, by supplying a few sets of a certain type. When the work is completed they will have a few dozen styles, shapes, sizes that will cover the whole phase of manufacture.

¶ In our tooth brushes the number of styles is confusing. The bristles must be white, soft, stiff and hard, although by the use of warm water all are in time rendered soft. The handles must vary in shape, size, bend and with a hole in the end or vice versa. The rows of bristles must vary from one to five. The use of black bristles is taboo, although this is superior to the white variety, which by bleaching has lost a large part of its virtue, and is of short duration. The black bristles on the other hand are stiff, and remain so after most strenuous usage. They will bear sterilization, and thrive in baths of hot water. Notwithstanding the virtue of the black bristles, we still continue the use of the white.

If we return to pre-war conditions, with over one hundred different styles, it will be a long time before the advent of a cheaper article.

In tooth powder we have an infinite variety. Truth be known, it is not the matter of powder, but rather elbow grease and the employment of salt or lime water as a dentifrice would produce better results.

Perhaps of all dental materials used today, our amalgams are most standardized. This, thanks to the late Dr. G. V. Black; but even here we are at sea, and the matter of zinc as a component is strongly defended by its adherents, and equally condemned by those who believe otherwise.

In the placing of artificial dentures by the dentist who standardizes his shades and colors to fit all faces, one of the most distressing things is to meet an old man, who, when he smiles, exposes a row of ivories that seem to reach from ear to ear, all of one color with thin unused edges, without a sign of wear. All of this is wrong. Why have your patients advertise a tooth factory, or a certain brand of dentistry?

A set of false teeth is much more natural when the color scheme is broken up; and several shades employed in their construction. The laterals and eye teeth, so called, may be darker, and serve to break up the monotony and have them appear more natural. As we grow older, our teeth get more stubby, and show signs of wear. We should grind down the edges of artificial dentures and duplicate nature.

In hospital construction one of the latest things is to standardize every ward; that is should be a fac-simile of the next. Every bottle, appliance and medicine is in place, and in duplicate.

There is much that dentistry can learn from the Council of

National Defence, and take advantage of events that have hurried us into warfare. If we profit by its lessons, instead of being a liability, it will in the end prove a valuable asset.

REVIEW OF A BOOK

This is against the rule but the editor has a good reason.



ELEMENTARY and Dental Radiography," Howard Riley Raper, D.D.S., Consolidated Dental Manufacturing Company, New York City, price \$7.00. This is a second printing of the second edition and has been adopted as a text book by the National Association of Dental Faculties. It is substantially bound, nicely printed on good paper, with over 500 pages and 500 illustrations. The X-ray pictures, most of them have not been retouched, look and appear like many of those made in our laboratory. Some are good, some are bad, a few are indifferent, but all tell a story of their own. — — —

The beginner on noting the size of the volume would ask for a smaller book, one which treats the subject in a less exhaustive manner, but here the entire subject of electricity is covered in only 13 pages. The subject of elementary radiography in 84 pages, and only 52 pages covering the detailed consideration of dental radiography technique. Thus the entire subject of elementary and dental radiography is covered in only 145 consecutive pages. The rest of the volume may be designated as a reference book, special attention being given to the Index so that the reader may easily locate any subject.

The whole matter of radiography is treated in a manner so simple that even he who runs may read. The author well says that the taking of an X-ray is a comparatively easy matter, but the interpreting of the photograph with the possibility of distortion, etc., is only for the experienced operator.

The X-ray requires an unusual intimacy with its idiosyncracies and great experience in its interpretation before a reliable opinion may be rendered. It is, therefore, apparent that the best skill in the manipulation of the X-ray apparatus is necessary. As one writer has well said: "It is an expensive plaything and a cheap necessity. It is a Sherlock Holmes of our interior and has an afternoon sewing circle beaten as a means of exposing our innermost secrets and obtaining inside information." — — —

The author has done his part in presenting a volume that is monumental and no man who practises the science of radiography, no matter what his experience, can afford to be without its aid and help.

THE COMING NATIONAL DENTAL MEETING



THIS year the committee have wisely set the time of meeting October 20-24, and the place at New Orleans, Louisiana. This is a most favorable period for the Queen City as the weatherman says this month has a high average in the sunshine column. The temperature lurks between slight chill and Indian summer warmth.

Outside of the meeting, New Orleans offers such sports as fishing, duck and snipe shooting, tennis, golf, swimming, yachting and motor-boating.

The Program Committee of the different sections have prepared, as shown in their preliminary announcement, a wealth of papers which should be of benefit to every one. Here everything will be up-to-the-minute, the great advances in dentistry are first announced; later to be taken up by the local societies, published in the dental journals, and when they have become accepted practice, appear in the text books. Thus we see that attendance at a meeting of this character means that you are to have advance information of the world's progress in dentistry.

One cannot attend all the sessions; but it is well to mark off the subjects that most interest you and make it a point to be on hand when the papers are read.

New Orleans with her many first-class hotels is an ideal place for convention holding and, under ordinary circumstances, there should be no difficulty in obtaining suitable quarters. With a modern sewage system and a board of health that is always in evidence, it is an ideal place for spending a vacation, or attending a convention.

It is one of the greatest sea food markets in the world and its restaurants have a reputation second to none. With its magnificent harbor and sight-seeing steamers, its many quaint, historical buildings, clubs and theatres, its French Quarter breathing a story of romance and mystery—there should not be a dull moment. This meeting ought to go down in history as one of the most successful.

The sessions commence on Tuesday, but many will be present on Monday and even Sunday, for one of the pleasures on these occasions is the meeting of old comrades and the pleasure of a talkfest which is not possible during the crowded sessions. So if you would thoroughly enjoy the meeting make it a point to arrive early, Sunday if possible and you will not regret so doing.

¶ The committee in charge are using every effort to make the convention a grand success and that New Orleans shall live up to its reputation for hospitality.

NOTE AND COMMENT

*The weaker sex
Is that portion
Of the human race
Who goes down-town
In zero weather
In a half-masted lace waist
And pumps,
To buy a muffler
And woolen socks
For her husband
So he can go to work.*

The sugar consumption of the United States advanced from fifteen pounds per capita in 1865 to eighty-five pounds in the year 1915.

Tin plate mills are increasing their output. The United States now produces three-fourths of the world's supply.

¶ Durham County, North Carolina, will establish a year-round dental clinic for its school children. It is expected that the formal opening will be July 1, 1919.

A rise in the price of platinum to possibly \$150 an ounce is looked for when the Government restrictions are removed, as present production in the Russian fields, almost abandoned, is far below normal consumption.

¶ In view of the National Dental Society Meeting at New Orleans, La., it is a matter of interest that the New Orleans Board of Health completed its one hundred years of service in March, 1919.

¶ The Health Committee of the Red Cross local chapter, Plattsburgh, New York, has appropriated \$600 to be used to establish a dental clinic in the city schools.

The citizens of McDowell County, West Virginia, by a majority of more than 1,500 voted in favor of authorizing the county court to levy a tax to establish a free dental clinic for the children of the county as provided by special act of the West Virginia legislature.

¶ Before the war Europe was learning to cultivate a taste for the American peanut; likewise India and Africa. As long ago as 1913 more than 500,000 tons were imported into France. The peanut is an important food adjunct, and its importation helps in the problem of feeding hungry Europe.

¶ The Springfield, Mass. Board of Health will start a second clinic in the north end of the city. Money has been appropriated by the City Council. The exact location has not been determined, but it is to be in one of the newer schools.

The British pound at this date is worth about \$4.35, and the American dollar is worth about forty cents, compared with its purchasing power five years ago. This brings the purchasing power of a pound Sterling down to \$1.75 here, compared with \$4.84 before the war.

The Rochester Dental Dispensary has recently extended its service to the children of the rural schools of Monroe County. Up to this time it has treated the teeth of the Public and Parochial schools of the city, but as stated, the work is now to be enlarged to include the rural school children.

Automobile stealing has grown to such an extent that it seems almost to have obtained the respectability of a sound commerce. It is stated that \$75,000 worth of cars are stolen daily. As a result companies will not insure an automobile except at prohibitive rates.

At a recent meeting of the New York State Dental Society, held at Syracuse, N. Y., a committee was appointed to have a special society of dentists operating in school dental dispensaries. Persons interested in such work, to be called at the meeting of the National Dental Association, October 20-24th, at New Orleans, La.

Statistics have shown that preventable accidents alone amount to 25,000 persons killed yearly and more than 500,000 seriously injured in industrial pursuits. More startling still, 30 per cent of the killed and 80 per cent of the injured were railroad employees. Mining ranks next in peril.

Glycerine serves many useful purposes. It is used for making transparent soaps and beautifying lotions; for making perfumes; as a lubricant for gas meters and machines of precision; an ingredient of copying and printers' inks; by the spinner and the weaver and in scores of arts and crafts.

With live hog quoted at \$23.00 a hundred in Chicago, the price of pork has advanced to forty-eight cents a pound. One sighs to be back to the time of his boyhood, when the best pork steak sold for eight cents a pound, and they threw in a hunk of liver. "Them were happy days."

The Duck-Billed Dinosaur who existed it is calculated some eight million years ago in the interior of the American Continent, sported more teeth than any other animal that ever lived. He had 2,500 by actual count. He was 45 feet over all and weighed a ton. Fifteen feet of his length was tail. The skull that contained the 2,500 masticators was four or five feet in length.

Seven out of nine children of school age in the city of New York are of immigrant parentage. The schools have to substitute English for more than seventy different languages spoken by the pupils. There are 904 district hospitals, homes, and societies for relief. This does not include the seventy-seven authorized war relief associations.

The Board of Education, Plattsburgh, New York, has decided to institute a dental clinic in the public schools.

Cummington, Massachusetts, has established a dental clinic through the efforts of the Selectmen and School Committee for the benefit of their town and those surrounding.

At a recent meeting of the Directors of the Midvale Steel & Ordnance Company, it was decided to spend three million dollars for a hospital for the use of the employees of the company and their families. It is believed it will be established at the Cambria (Pa.) works.

The State of Massachusetts has an amendment to the State Labor Laws requiring every employer of over one hundred persons to provide facilities for the treatment of persons injured or taken ill on the premises. Also civil and sanitary facilities for heating or warming of food to be consumed by the employees.

¶ J. M. A. Sanz, in *Siglo Medico* says: "The medical fees paid by King Antiochus, 300 years B. C., are said to have been about \$120,000. Dubois received \$20,000 and the title of Baron for attending the wife of Napoleon. The latter declared that he did not believe in physicians, but he averaged over \$40,000 a year paid to doctors, dentists and chiropodists.

¶ The importance of dentistry as a health factor is becoming world-recognized. This applies even to England where dentists have been perhaps less appreciated than in any other country. The Prince of Wales has graciously consented to become the President of the Royal Dental Hospital of London, Leicester Square.

¶ A new explosive is being used in South African mines and is resulting in a great saving of nitro-glycerin. It is called sengite, and is a gun cotton explosive, specially prepared and put into cartridges for the mines. The ingredients of sengite are more readily obtainable than nitro-glycerin, they are added to gun cotton.

¶ In the Spanish-American War one man out of five, or twenty per cent, contracted typhoid fever which was responsible for eighty-six per cent of the total deaths. In the present war during a period from December 7, 1917, to April 5, 1918, twenty-one weeks, of one million of our recruits who had been vaccinated against disease but ten cases of typhoid developed, i. e., one in 100,000 soldiers.

¶ According to a recent report there are 1,930,000 people employed in the manufacture and sale of motor cars. Of this number 580,000 are in automobile factories, 1,020,000 make parts and accessories and 230,000 are employed by agencies and garages. This number equals 10 per cent of all the people engaged in mechanical and manufacturing industries of the United States.

¶ The odor of cloves has been known to destroy microbes in 35 minutes; cinnamon will destroy some species in 12 minutes. In 45 minutes the common wild verbena is found effective, while the odor of some geranium flowers has destroyed various forms of microbes in 50 minutes. The essence of cinnamon is said to destroy the typhoid fever microbes in 12 minutes, and is recorded as the most effective of all odors as an antiseptic.

¶ The total seating capacity of motor cars is 25,000,000, greater than that of railroads and street cars combined. The passenger miles travelled by automobiles exceeds those of street cars and steam railroads, by about twenty miles for each passenger.

¶ As a result of our acting in this War of the Nations we have an enormous bill to pay. The national debt of the United States is about twenty-five million dollars. This means about \$1,000 per capita for every man in the country over twenty-one years of age. It is approximately half our national income for the year. Let us get at least a part of this debt paid before we spend all we are making, as we cannot eat our cake and have it too.

¶ The Canadian legislature has appropriated ten thousand dollars to make a medical and dental inspection of the rural schools. Four physicians have been appointed. A critical dental examination is a matter of time and the employment of one dental inspector is a crime. The whole sum would not be sufficient to make a complete dental inspection of the Province.

¶ A Provincial Director of Dental Inspection for the Province of Ontario has recently been appointed and Dr. Fred J. Conboy is to undertake this important work. The work to be carried on will be of an educational nature. The department striving with the public and their representatives, in municipal councils and boards of education for the urgent need of appointing a permanent dental inspector to work in each local district.

¶ The Canadian Dental Research Foundation is in process of formation. An appeal to the members of the dental profession of Canada has been sent out and it is proposed to raise \$50,000 for this purpose. The students of the Royal College of Dental Surgeons have raised within the college walls a total of \$1,500. Many unsolved problems are facing the dental profession and Canada proposes to do her share in the solution.

¶ The King is dead! Long live the King! "Nuxated Iron," a patent medicine, for a period has been running an account of Jess Willard being able to whip Jack Jackson because he took to the habit of using Nuxated Iron. Now they are out with another advertisement from one Dempsey, who has been taking Nuxated Iron, and attributes his winning the prize fight from Willard as due to his taking the drug. All of which we are supposed to believe, and buy liberal quantities of Nuxated Iron. Great is the power of the press!

¶ The discarded nightcap, such as our grandparents used to wear is said to be a promotor of sleep. In addition to keeping the head warm it shuts out extraneous sounds and other sense impressions.

¶ This experience is confirmed by that of the soldiers in the present war who wore the knitted helmet in camp and billet and dugout, and found its warmth most soothing and comforting, and promotive of sleep.

¶ "Madam Walker," who died recently at Irvington-on-the-Hudson, at the age of fifty-two, was the richest colored woman in existence, she leaving an estate of more than one million. The Madam was a washtub artist a few years ago at Denver, Colorado. Here she got the idea of preparing a hair preparation to take the kink out of the negro's hair. From the sale of this concoction she made her fortune.

¶ Perhaps no part of the country has felt the influence of the War so greatly as the mountainous districts of the South. With the return of its soldier boys with new ideas and a larger outlook of life, they have advanced one hundred years. They have created a greater interest in education among the mountainous people than has been known since Daniel Boone set foot in Kentucky 150 years ago.

¶ It may seem a long way from good roads to better babies and yet the two are closely connected. Of what use is the little hospital at the county seat, if the woman whose life depends upon its care cannot be taken there swiftly and comfortably. The only relief is to make the farm accessible to the doctor and nurse—to make the hospital and the health center accessible to the farm. This can only be done through better roads.

¶ In the entire country there is one bank for every 4,032 persons. North Dakota leads in this particular with one bank for every 948 population. The Philippines have one bank to each 1,000,000 persons and are at the bottom of the list. These figures were recently compiled by the Omaha Bank of Commerce and appear in the *New York Annalist*. Through the help of the banks the Government sold last year more than \$1,000,000,000 worth of Thrift Stamps, an equivalent of \$10.00 per capita.

¶ A large part of the Irish linen supply has come from Russia and since no material has been imported from Russia, Ireland has had to depend on her own resources. As a result we are faced with a famine of real "Irish linen." To supply this deficiency Canada has come to the front and established a linen industry which promises to supply her own needs and that of the Allies. This is only an illustration of an industry adapting itself to circumstances

¶ Due to the lack of cold weather the past season, ice has risen to unknown figures, a ton retailing now for the sum of \$11.00. This is where you hang out your card and delivery is made by the iceman. Stations have been established at which people can buy a piece of ice for five or six cents, paying cash and carrying it home themselves. This, during the past season, was very successful in Detroit, Michigan, and the company which established these stations has now thirty-five in operation. There is no charity or philanthropy about "cash and carry" ice. The company has found it a very profitable venture.

¶ With the advent of modern chemistry in the field of mining it is possible to work many ores that heretofore have not been of profit. The greatest of Alaskan mines is one that yields on an average of \$1.50 a ton. There is in sight one hundred years' work and until these fields are exhausted the world cannot be said to have used its visible supply of gold.

The following is from a *Government Bulletin*: "Probably the first thing to consider is the teeth. If they are badly worn, they should be renewed. Any bent or damaged teeth should be replaced. Each tooth should be tapped lightly with a hammer to determine by the sound whether it is tight. Any loose teeth should be driven firmly in place, with a heavy hammer, and a nut drawn down tight against the bar or spring washers." The *Bulletin*, we forgot to say, refers to the care and repair of farm implements.

¶ It is now proposed to issue abstracts of titles for automobiles. The immediate and most important results to the motorist will be a material reduction in the number of cars stolen and a reduction of the insurance rates. Under this plan it will be quite as impossible to steal and sell a motor car so protected as it would be in the case of real estate. In addition, the abstract will serve a number of other worthy purposes, such as providing information of mortgages, liens and similar legal claims as may exist against cars. The automobile abstract is the biggest help in motor car protection since the advent of the automobile itself.

¶ Just in passing, referring to H. C. L., the oyster stew is a horrible example. The oyster digger who used to get \$1.00 a day and grub, now demands \$125 a month. They work five days a week. Oyster openers, formerly content with \$15.00 a week and board, now demand \$25.00 a week. Waiters and dishwashers insist on wages lordly in comparison with their former pay. Crackers and butter think they belong to the jewelry trade. Hauling oysters costs forty cents a sack. In the good old days the shells could be carted away for nothing. Now it costs \$6.00 a load. With all the rest, "oysters ain't so good as they were last year."

The following from *Hospital Management* is of interest: "There are many little ways in which the hospital can teach right ways of living to patients who come to the institution for treatment of civic diseases or conditions. For example: a certain Ohio hospital furnishes as a matter of routine a tooth brush to every patient who does not happen to be provided with one. The timely suggestion regarding mouth hygiene forms a lesson which is usually taken to heart, and great improvement along this line is always noted before the patient is discharged. The tooth brushes distributed by the hospital are not expensive, but they are quite useful, and the plan of bringing home the importance of oral hygiene to the patient has been found an important one."

A movement to create a Department of Public Health in the Federal Government has been launched in Congress in the form of a bill introduced by Congressman John McDuff of Alabama, which authorizes the President to appoint a Secretary of Public Health at a salary of \$12,000, who is to be head of the department. The Secretary of Public Health should have personal jurisdiction and supervision of all public health measures of the Federal Government, except those of the Medical Department of the Army and Navy. The measure provides for the organization of the following bureaus: Sanitary Research, Vital Statistics and Publications, Foods and Drugs, Quarantine, Sanitary Engineering, Government Hospital Personnel and Accounts.

¶ Waterbury, Connecticut, has engaged a dentist and two lady assistants to look after the dental needs of the public school children. The work will first be confined to prophylaxis and preventive dentistry. Tooth brush drills and helping the children to keep their own mouths clean will be featured 20 20

¶ The Management of the new hotel opposite the Pennsylvania station at New York City has opened a hospital, fully equipped with operating room and Roentgen-ray apparatus for the use of its more than two thousand employees. The hotel has conducted a clinic for several months and treated an average of sixty patients daily. A visiting nurse will be employed to look after the home conditions of the patients. Dr. Joseph Darwin Nagle is in charge, assisted by a staff of visiting physicians, surgeons, and a corps of trained nurses. 20 20

¶ The North Carolina Legislature, by recent legislation, has made it lawful for the State Board of Health to appoint a regular licensed dentist who shall be known as an assistant secretary. His duties will be that of establishing a Bureau of Oral Hygiene. Part of the act of the Legislature provides for the appointment of a reputable dentist in each county who is to be known as the county mouth hygienist. These county mouth hygienists are to serve without compensation in conjunction with, and under the direction of, the state officer. Salary of new appointee is to be three thousand dollars and expenses 20 20

¶ At the recent meeting of the National Tuberculosis Association at Atlantic City, one of the speakers said: "Brush your teeth; keep your mouth clean. The army bought tens of thousands of tooth brushes and lots of soldiers used them to clean the cracks in their shoes. I wonder how many of the 670 men who died at Camp Lee would have been alive today if they had kept their mouths clean. Wash your hands. Hardly anybody washed their hands forty years ago except upon compulsion. Most infectious diseases enter the system by way of the mouth, conveyed there by the hands. Unclean hands carry disease. Rubber gloves were one of the greatest things that happened in medicine." 20 20

¶ During this War of the Nations we have looked forward to the trade expansion of all Europe, especially Germany, to our own detriment. As a matter of fact the countries lately at war are bled white. They have no money to engage in manufacturing, to buy raw materials, or the necessary machinery, and unless the United States comes forward with a loan of huge proportions, it seems unlikely that modern Europe, as we know it, will be a factor in the manufacturing industry for the next decade.

¶ We find that Europe's buying ability is deplorably small. She has little wherewithal to pay for what she needs. With immense debts, the interest of which, at least, must be met, it is a serious question if we can avert the calamity that threatens the world.

Dr. George W. Goler, Health Officer, Rochester, New York, in his report for June, 1919, says : " For more than ten years the Bureau has been attempting to place before the public the dangers of decayed teeth and the presence of large tonsils and adenoids. There can be no question but that one day the child with decayed teeth, diseased tonsils and dribbling adenoids will not be permitted to go to school, because it will be viewed as a possible dangerous character. * * * * * " Let every one take his or her mouth to the dentist at least, every six months ; or better, once in three months. Diseases caused by obstructions in the breathing apparatus and defective teeth cannot always be cured by treating them after fifty. Prevent them in childhood and early youth by taking out the tonsils and repairing the teeth."

The Junior Red Cross of Leominster, Mass., is making appeal to all of its friends for canned fruits to be put up and laid aside for the big Junior Carnival, which will be held October 18th. The society is depending on this fruit sale as one of the chief sources of revenue. At the cessation of the war, the activities of the Junior Department were directed to local work, and a field was easily found. Nearly all the resources of this society are devoted to the care of the teaching of school children; children not able otherwise to receive the necessary attention. As yet the city has made no provision for this work, and since the work of the Child Welfare Society ceases with children of school age, there was no fund to devote to this purpose. The Junior Red Cross working in conjunction with a school nurse is sending to the dentist for treatment all children recommended by the nurse. These are children whose parents are not able to give them the necessary attention.

Eugene S. Talbot, M. D., D.D.S., in the May *Dental Cosmos*, says: " A patient's health is worth more than all the teeth. If patients with one or more pulpless teeth are complaining of bad health, I do not hesitate to remove the pulpless teeth when all other sources of infection have been removed. I have arrested arthritis deformans, cured headaches, indigestion, boils, skin eruptions, and large glands in the neck, supposed to be due to tuberculosis and other diseases, by removing pulpless teeth that did not show defects in the X-ray." And again, " We have arrived at a very critical period in dental practice in regard to oral sepsis and focal infection. Are we to go on filling roots of teeth when we know that 95 per cent of root-fillings are failures ? Or that many diseases of the body are due to imperfect root-fillings ? Or shall we extract the teeth to be sure that systemic disease cannot occur ? "

¶ The new prohibition law allows the physician to prescribe not more than one quart of liquor for a patient at a given time, and in no case shall he prescribe alcoholic liquor unless the patient is under his constant personal supervision. The prescription which is non-refillable, must show the name and address of the patient, including the street or apartment number, if any, the date when prescription was written, condition of illness for which prescribed, and the name of the pharmacist to whom prescription was presented for filling. Physicians desiring alcohol for strictly scientific and medicinal purposes must file application for a permit with the Collector of Internal Revenue of the district in which they live. This application must be accompanied by bond furnished by a Surety Company, or signed by two individuals as sureties. Both the application and bond must be in duplicate. A bond for \$100 allows the physician to have on hand, or in transit, twenty gallons of alcohol or liquors. The same privilege is open to dentists who may become applicants for a permit. An account of all alcohol, or alcoholic liquors, purchased and on hand must be ready at any time for the inspection by an Internal Revenue officer. Alcohol or alcoholic liquors purchased under these conditions cannot be used for the physician's own consumption.

¶ The dental hygienists of Connecticut, some 150 in number, met at Bridgeport, Connecticut, May 24, 1919. Papers were read on different subjects by Doctors A. C. Fones, Harvey Burkhart, Albert Stevenson, and Edward Kirk, who had just returned from over-seas, made an informal address at the banquet. His intimate stories of London experience at the close of the War led up to the critical situation in the dental profession at the beginning of the hostilities and the stringent methods now taken to remedy same. That there were registered legally less than 5,000 dentists for the 40,000,000 and that one dentist was allotted 180,000 men was the huge problem.

¶ Mrs. A. C. Fones, Chairman of the Banquet Committee, arranged attractive decorations with baskets of purple lilacs and dark red roses and unshaded purple candles.

¶ Dr. A. C. Fones read a paper on, "Five Years of Mouth Hygiene in the Public Schools of Bridgeport."

¶ The supply of physicians in this country is still greater in proportion to the population than that of any other civilized country. That is, one physician for every 712 people or a total of 147,812 physicians. This would mean that we have twice as many physicians to population as in the most favored countries of Europe. We have, however, a large number of physicians engaged in the work of public health, preventive medicine, laboratory and diagnostic work, full time teachers in medical schools; men who devote themselves to insurance problems, and research given to tuberculosis, mental diseases, cancer and other like problems. The chief complaint in regard to the scarcity of physicians comes naturally from the sparsely settled rural communities. This is due in a large degree to the difficulties of inter-communication and transportation. With the advent of the telephone, the automobile and improved roads, these conditions in rural communities have gradually improved.

¶ "Lewisite" is the deadliest poison yet discovered. Guarded night and day and far out of human reach on a pedestal at the Interior Department, on exhibition, is a tiny vial which contains a specimen of the deadliest poison ever known, the product of an American scientist. It is what Germany escaped by signing the armistice before all the resources of the United States were turned upon her.

¶ Ten airplanes carrying Lewisite would have wiped out every vestige of life, human, animal, and vegetable, in Berlin. A single day's output would snuff out four thousand lives on Manhattan Island. A single drop poured in the hand would penetrate the blood, reach the heart and kill the victim with great agony.

¶ When the armistice was signed Lewisite was being manufactured at the rate of ten tons a day, and three thousand tons of this most terrible concoction ever conceived would have been ready for business on the American Front, in France on March 1.

¶ In the course of an article on the tomato as an antiscorbutic a medical exchange says: Side by side with the juice of the lemon and the swede, the tomato is now worthy of ranking, according to the simultaneously published observations of Hess and Unger at the Bureau of Laboratories in the New York City Department of Health, and of Givens and McClugage at the University of Rochester. Hess and Unger have actually administered canned tomatoes to infants who were receiving pasteurized milk, substituting it in the dietary for orange juice, which has become increasingly expensive. The amount given to babies 3 months or more of age was 15 c.c., half this quantity being given daily to younger infants. The tomatoes have been uniformly well tolerated throughout the summer by babies as young as 1 or 2 months of age. The fact that both the New York and the Rochester investigators found that the methods of preservation—canning and drying respectively—do not entirely deprive the tomato of antiscorbutic potency, gives a welcomed addition to the list of perennially available food products that can be depended on to protect infants, as well as adults likewise depending on restricted diets, from the danger of scurvy.



¶ A writer in the *J. A. M. A.*, says: "It is true that during the War no entirely new surgical principle was uncovered. But in this fact there is no discredit to surgery, since it is equally true that the long established principles on which surgery rests emerged triumphant from a test, the equal of which they will never meet again. Pasteur and Lister builded for all time. At no period of the War was the truth of the principles of asepsis and antisepsis in danger; their practice, however, was at first rudely shaken. The novelty of it all, the conditions of time, soil, movement, equipment both human and material, the number of wounded, their uneven distribution, the multiplicity, the extent and the severity of their lesions, the virulence and rapidity of their infections seemed about to overwhelm our methods of surgical practice. But organization of our forces and the application of knowledge already possessed to conditions in the end adequately comprehended, finally resulted in the advent of the two great surgical developments of the War, the "primary closure" of contaminated wounds, and the so-called Carrel-Dakin method of treatment through which successful secondary suture of once infected wounds was rendered feasible. * * *

¶ War has brought into sharp relief the fact that the prompt application of proper treatment is the prime essential to success in traumatic surgery and that lack of it is the great contributor to disaster; it has given certainty to our opinion that mechanical cleansing of a wound has greater basic value than attempts at chemical sterilization; it has given new strength to our belief that the body tissues and fluids possess in themselves tremendous powers of resistance to infection. if only the contaminating agent and the hopelessly traumatized tissue are removed. * * *

¶ It has been demonstrated that even in severe wounds with existing contamination, infection can be prevented or controlled. Tetanus has practically been banished because of the preventive quality of the antitoxin. Treatment by magnesium sulphate and phenol has been definitely put aside. * * * There is no longer any question as to the proper treatment, either in peace or in war, of penetrating wounds of the abdomen. Many of our doubts in chest surgery have vanished. The treatment of fractures has been stabilized by the standardization of splints and other apparatus for immobilization." •••

FUNNIES

We want good, clean humor for this page and are willing to pay for it. Send me the story that appeals to you as "funny," and if I can use it you will receive a check on publication.

George L. Kinter, 103 Clarendon, Ave., Grafton Heights, Pa.

☞ Magistrate: "Can't this case be settled out of court?"

Mulligan: "Sure, sure; that's what we were trying to do, your honor, when the police interfered."

—L. A. R. Jackson, Michigan.

☞ "It's four years now since he left me" said the deserted wife. "I remember it just as well as yesterday—how he stood at the door, holding it open till six flies got into the house."

☞ Willie's composition on Soap: "Soap is a kind of stuff made into nice looking cakes that smells good and tastes awful. Soap pieces always taste the worst when you get it into your eye. My father says the Eskimos don't never use soap. I wisht I was a Eskimo."

—T. P. F., Pineville, Ky.

☞ Mrs. Sargent watched her maid who had the habit of meeting the grocery boy at the back door. When she came in, Mrs. Sargent said severely:

☞ "Norah, I saw the grocer's boy kiss you when you went out after groceries. Hereafter, I shall go, myself."

☞ "An it will do yez no good, ma'am," said Norah, "he says he won't kiss nobody but me."

—J. M. R., Enid, Okla.

☞ Teacher—"Johnny, can you tell me what a hypocrite is?"

☞ Johnny—"Yes, ma'am. It's a boy what comes to school with a smile on his face."

—T.P.F., Pineville, Ky.

☞ A Theological professor was delivering a lecture before the class on their moral conduct. He finished up with, "My young men do you know that the floor of hell is paved with champagne bottles, chorus girls and automobiles?" From the back of the Chapel there came a big bass voice, "O death, where is thy sting?"

☞ A British gunner who had successfully passed a blacksmith's course was home on furlough, wearing the hammer and pincers on his arm, when he was accosted by a civilian, who asked what the decoration was for.

☞ "Oh," replied Tommy, "I'm an army dentist!"

☞ "I see," said the civilian. "Of course the pincers are for extracting teeth. But what is the idea of the hammer?"

☞ "Well, you see, it's like this. Some of the chaps are a bit nervous, so we use the hammer to chloroform them," was the reply.

—C. F. H., Kaufman, Texas.